MAGAZINE OF AMERICA'S AIR FORCE

Airman

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JULY-AUGUST 2009

SHOULDERING THE LOAD

Airman

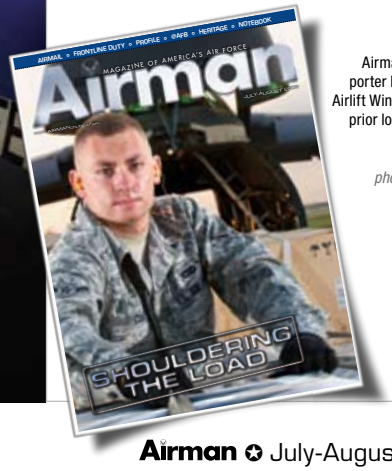
Design by Billy Smallwood

Airman CONTENTS

JULY-AUGUST 2009

Features

Departments



On the Cover

Airman Jacob Cook, an aerial porter Reservist with the 433rd Airlift Wing, tightens a cargo strap prior loading a pallet on a AMP-modified C-5 Galaxy.

photo illustration and design by G. Patrick Harris
photo support by Lance Cheung

COMMENTS

Got something to say about Airman? Write us at **airman@dma.mil,** or visit **www.AIRMANonline.af.mil,** to share views with fellow readers.

THE BOOK 2009

On page 43, of the Airman's "The Book 2009," I noticed that the PME badge was missing from the duty badges and berets segment.

As a proud member of PME career field, I would like to bring this omission to your attention. PME is the cornerstone to Air Force Enlisted leadership and I believe it is just as important as being an AETC instructor and a member of the Recruiting Service. Thank you for your time and attention in this matter.

Tech. Sgt. Stephen Scattergood
Instructor, Airman Leadership School

Editor's Note: *Duty and occupational badges in "The Book" is one of the most common comments the editorial staff receives. Unfortunately, there are far too many badges to include every one in "The Book." Air Force Instruction 36-2903 lists 21 duty badges approved for wear. The Airman staff is already preparing material for next year's almanac and your suggestion will be part of the planning.*

On page 2, in the Medal Of Honor Recipients section, I noticed a small error I wanted to bring to your attention. It reads that Medal Of Honor Recipient John L. Levitow died in 2002, which is incorrect. In fact, John L. Levitow passed away on Nov. 8, 2000. The date is firmly implanted in my memory, it was the night I graduated from Airman Leadership School at Malmstrom Air Force Base, Mont. His passing was sadly announced during the ceremony.

Respectfully Submitted,
MSgt Brian P. Little

Editor's Note: *You are absolutely correct. We apologize for the oversight regarding the passing of such a heroic Airman. After receiving the Medal of Honor, Airman 1st Class John Levitow remained in the Air Force and was promoted to staff sergeant before separating in 1974. After spending more than 20 years dedicated to veteran's affairs, he passed away Nov. 8, 2000 after a lengthy battle with cancer.*

Sergeant Levitow's heroic actions, which led to his award of the Medal of Honor, took place Feb. 24, 1969. Then-Senior Airman Levitow was a loadmaster on an AC-47 gunship. On that fateful day, the AC-47 he was flying on was hit by an 82-millimeter mortar shell that sent shrapnel throughout the cabin, injuring everyone in the back of the aircraft.

Through a haze of pain, Airman Levitow saw a burning Mark 24 magnesium flare rolling free within the fuselage near live ammunition.

Airman Levitow threw his body on the 4,000 degree flare and dragged it to the rear of the aircraft where he threw it out the cargo door. His actions saved the lives of everyone on board.

In memory of this heroic Airman, the Levitow Honor Graduate Award is presented to the top professional military education graduate from Air Force Airman Leadership Schools. The 737th Training Group headquarters building at Lackland Air Force Base, Texas, has also been named in his honor.

I was just reading the March issue of "The Book 2009," as I have for numerous years, when I noticed there was incomplete information provided on page 45 under the section for "Officer" rank.

The warrant officer rank was not included in the chart almost as if Warrant Officers don't exist in the three other branches of military listed.

As a prior Air Force technical sergeant who did not have any idea what a warrant officer was until I was on joint assignment with one, I believe this is contributing to the problem of ignorance among our younger Airmen and even some of our older Airmen. Many Airmen see the warrant officer rank and do not know whether they should salute or not, they do not know whether it is a [Reserve Officer Training Corps] rank, Air Force Academy cadet rank or some new foreign rank.

I can understand not including the warrant officer rank in the pay charts because it does not really have an impact on anyone in the Air Force, but in the military of today Airmen are increasingly working side by side with members of all branches.

Leaving the warrant officer rank out of the "The Book 2009" was simply disrespectful to all warrant officers past and present. As warrant officers we are commissioned officers and should not have been ignored in this issue simply because the Air Force no longer has warrant officers.

In fact I believe it is extremely important that Airmen know and understand exactly what warrant officers are and what role they did "once upon a time" play in the history of the Air Force.

I realize the issue is published and what's done is done but I believe it is worth considering for "The Book 2010" to honor and recognize all warrant officers as well as educate today's Air Force.

Warrant Officer 1 Michael C. Nedeau

Editor's Note: *Thank you for taking the time to point the omission of warrant officer ranks in "The Book 2009."*

This was the first time Airman magazine published a joint rank and insignia chart with the intention of giving our Airmen working alongside our sister services the information they need about the rank structures in a joint environment. We agree that the exclusion of the warrant officer ranks was an oversight that requires correction in the next edition of "The Book."

Warrant officers served in the Air Force until the service discontinued the program in 1959. The last Airman to wear the warrant officer rank was Chief Warrant Officer 4 Bob Barrow who retired from the Air Force Reserve in 1992.

In Airman's "The Book 2009" there was an error made in regard to the black beret. You refer to the first black beret as one worn by an Air Mobility Liaison Officer. This is not correct. The officer's version of the black beret is worn by an air liaison officer, an integral part of an enlisted-heavy Tactical Air Command and Control Specialist career field.

These officers deploy on the ground with the Army at echelons of battalion and up and provide valuable knowledge of close air support aircraft and its proper utilization to the supported Army commanders. Some of these ALOs are even JTAC certified and have the authority to provide terminal attack control to get bombs on target. These dedicated individuals have nothing to do with mobility and I am sure they would like to be recognized for the jobs that they actually do perform in a combat situation.

Staff Sgt. Eric DuBois
169th Air Support Operations Squadron

Editor's Note: *The black beret depicted with captain rank on page 43 of "The Book" should read Air Liaison Officer. Thank you for taking the time to point out the error and let our readers know more about this important career field. Air Liaison Officers are authorized to wear the black beret, flash, and rank while assigned to a TACP unit, but not at any other point in their career.*

TACP units can also be attached to Special Forces, Navy SEALs, and Army Rangers, as well as Joint Special Operations Command units and multi-national Special Operations task forces, primarily as communications experts and precision airstrike controllers.

In addition, TACP members can be assigned to AFSOC Special Tactics Squadrons to train Air Force Combat Controllers, traditionally responsible for austere airfield air traffic control, in the tactics, techniques, and procedures of close air support control.

Airman

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ABOUT AIRMAN

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Frontline Duty

AIRMEN PERFORM UNCOMMON MISSIONS

Airmen perform tasks every day that most Americans never get the chance to do. They may cruise at more than 1,100 mph without afterburner in an F-22 Raptor, hydraulically open the engine cowlings of multi-million dollar aircraft to repair components, or even outfit a military working dog with specially-made goggles before taking off in a helicopter over Iraq.

That is exactly what Staff Sgt. Phillip Mendoza III does before he and his dog Rico board a helicopter for aircraft entrance and exit procedures and air-assault training.

The training exposes the security forces member's dog to noise and gusts from the propellers in a training environment.

"When the K-9 muscle memory kicks in from the training, the K-9 knows to be calm and stay close to the handler," said Sergeant Mendoza.

As for real mission duties, the two are outside the wire performing tasks including explosive detection, and personnel, vehicle and open area searches.

On one of these searches, Rico successfully located an explosive device before it could harm anyone.

"If that [explosive device] was set off, it could have killed some of our coalition forces," Sergeant Mendoza said. "That would have to be, by far, the biggest accomplishment that we have had together as a military working dog team."

"I love it. To get the chance to clear routes for personnel so they may pass safely and to find explosives so that they can't be used against coalition forces is very rewarding. I am honored to work with a military working dog," said Sergeant Mendoza.

—Airman staff

COMBAT COMPANIONS photo by SENIOR AIRMAN ELIZABETH RISSMILLER

Staff Sgt. Philip Mendoza pets his military working dog, Rico, wearing specially made goggles during training aboard a helicopter at Joint Base Balad, Iraq. The training teaches the team how to safely and properly enter and exit aircraft, and prepares them for future air-assault missions. Sergeant Mendoza is a 332nd Security Forces Group military working dog handler deployed from Moody Air Force Base, Ga. He is a native of Lancaster, Texas.

LIGHTNING STRIKE An F-35 Lightning II, also known as the Joint Strike Fighter, test aircraft sends contrails streaming off its wings as it banks over the flightline at Eglin Air Force Base, Fla. The aircraft is the first F-35 to visit the base that will be the future home of the JSF training facility.

photo by SENIOR AIRMAN JULIANNE SHOWALTER

FOCUSED FIGHTER Capt. Shane Willis stops, looks and listens during an operational readiness inspection at Osan Air Base, Korea. Captain Willis is assigned to the 25th Fighter Squadron there.

photo by STAFF SGT. BRIAN FERGUSON

TAILGATING PARTY Two crew members from the 71st Rescue Squadron at Moody Air Force Base, Ga., sit on the ramp of an HC-130 as it deploys flares during a joint air power demonstration over Virginia Beach, Va.

photo by SENIOR AIRMAN SCOTT ALDRIDGE

SPEEDY RECOVERY Air Force Reserve Command's 920th Rescue Wing pararescuemen position an inflatable flotation collar around a mockup of the Orion space capsule during recovery testing near Cape Canaveral Air Force Station, Fla. The collar stabilizes the capsule after water landing.

photo by TECH. SGT. PAUL FLIPSE

BIRD OF PREY Maj. Dave Skalicky, an F-22 Raptor demonstration pilot, soars above the crowd April 26 during the Air Power over Hampton Roads air show at Langley Air Force Base, Va. This annual open house helps educate the public on Air Force capabilities and shows appreciation to the local community.

photo by SENIOR AIRMAN VERNON YOUNG

MAINTAINING GIANTS Two maintainers await the arrival of fellow maintenance crewmembers on the flightline at Dover Air Force Base, Del. The combined efforts of Dover's C-17 and C-5 maintenance crews keep the base's Galaxy, Super Galaxy and Globemaster III aircraft in the sky.

photo by TOM RANDLE

NEW PERSPECTIVE Pilot Ed Hamill turns his Air Force Reserve stunt plane upside down to get a better look at four F-15E Strike Eagles approaching from the rear. Mr. Hamill was participating in a two-day air show at Seymour Johnson Air Force Base, N.C., which attracted more than 100,000 spectators.

U.S. AIR FORCE PHOTO

OPEN FOR BUSINESS Tech. Sgt. Christopher Thompson, 660th Aircraft Maintenance Squadron, Travis Air Force Base, Calif., hydraulically opens the engine cowlings of the No. 2 engine on a KC-10 Extender to repair the control solenoid valve for a thrust reverser.

photo by LANCE CHEUNG

BOOMING CAREER Master Sgt. Mylo Gibson records the amount of fuel he transferred during a multinational exercise over the Baltic States of Estonia, Latvia and Lithuania. Sergeant Gibson is a boom operator assigned to the 351st Air Refueling Squadron at Royal Air Force Mildenhall, England.

photo by STAFF SGT. JERRY FLESHMAN

POISED FOR ATTACK An Airman mans a machine gun on an HH-60 Pave Hawk helicopter during a proficiency exercise outside Baghdad, Iraq. The pararescueman is from the 64th Expeditionary Rescue Squadron at Joint Base Balad, Iraq.

photo by STAFF SGT. JAMES L. HARPER JR.

SET TO PROTECT More than 4,000 F-16 Falcon 20 mm rounds are loaded into a universal ammunition loading system during Operational Readiness Exercise Beverly Bearcat at Osan Air Base, Republic of Korea.

photo by STAFF SGT. BRIAN FERGUSON

photo by Senior Airman Jonathan Snyder

Making BIGGER Better

MODIFICATIONS BRING RENEWED LIFE TO THE AIR FORCE'S LARGEST AIRCRAFT

STORY BY STAFF SGT. J. PAUL CROXON ✪ DESIGN BY MIKE CARABAJAL

For an aircraft that can haul 271,000 pounds and 81 troops more than 3,200 miles, the idea of making the C-5 Galaxy better is just as daunting as its size. Couple that with training a rather large crew composed of three career fields and the task of making the enormous weapon system more efficient seems even more unlikely. Yet that's exactly what Air Force officials are doing though modifications and training.

Over the next few years, the entire C-5 fleet will undergo avionics, engine and other modifications making it possible for the aircraft to perform better. Additional efficiency already has been gained by consolidating all preliminary C-5 aircrew training at one location, enabling students to receive standardized training and establish a total force foundation between active-duty, Guard and Reserve aircrews.

MODIFY OR RETIRE

Built between 1969 and 1989, the C-5 Galaxy is able to carry outsized and oversized cargo other aircraft can't. Yet poor reliability rates threatened to doom the gigantic aircraft to an early retirement. In the late 1990s a study was conducted to determine the service life in the 112-plane C-5 inventory. The study revealed 80 percent of the C-5 airframe service life was left. In response to the study, Air Mobility Command officials initiated a program to modernize the fleet.

The C-5 modernization program is a two-step process, though the entire fleet will not undergo both phases. Known now as a

A C-5M Super Galaxy drives through deep snow while conducting cold weather testing at Eielson Air Force Base, Alaska. This is the first C-5M to undergo cold-weather testing. The C-5M features new CF-6 engines, pylons and auxiliary power units, flight controls, landing gear and pressurization system. The aircraft sat for more than 24 hours in temperatures as low as minus 25. (U.S. Air Force photo/Senior Airman Jonathan Snyder)

photo by Staff Sgt. Bennie J. Davis III

C-5M Super Galaxy, three aircraft have already completed both steps. Two are stationed at Dover Air Force Base, Del., while the third is undergoing programmed depot maintenance at Warner Robbins Air Logistics Center, Ga.

The Avionics Modernization Program, or AMP, is the first step in bringing the entire C-5 fleet into the 21st century.

"Installation of new communication, navigation, surveillance and air traffic management and navigation safety capabilities improves air traffic management by taking advantage of optimum air routes," said John Artuso, director of the 716th Aeronautical Systems Group. Safety equipment also includes a traffic alert and collision avoidance system and terrain awareness and warning system.

These new systems allow C-5 pilots to communicate in a similar way to more modern military and commercial aircraft like the C-17 Globemaster III and Boeing 747.

"It has new features that will help us communicate with ground control," said Lt. Col. Darrell Brandon who is currently in AMP upgrade training. "It's an automated communication system almost like texting. In a legacy aircraft we would have to call to get oceanic clearance, this allows us to receive it electronically."

The C-5 fleet will be upgraded to the AMP systems by 2015 at a total estimated cost of $1.4 billion.

The second phase of modernization will transform 52 AMP-modified Galaxies into C-5M Super Galaxies. Known as the Reliability Enhancement and Re-Engining Program, it includes replacing the propulsion system and more than 70 unreliable systems, components and structural assemblies. It will improve reliability, maintainability, availability and aircraft performance. These modifications are designed to reduce the total ownership cost and operating costs, Mr. Artuso said.

One of the most noticeable enhancements is the replacement of the four General Electric TF-39 engines with commercial off-the-shelf GE CF6 engines. These new engines not only are quieter, they also are more powerful enabling the C-5M to have a 58 percent faster climb rate. They also allow the C-5M to operate at a

The first phase C-5 Galaxy Avionics Modernization Program or AMP replaces existing analog avionics with modern digital displays carrying the Galaxy into the 21st Century by installing new communication, navigation, surveillance and air traffic management capabilities. (U.S. Air Force photo by/Staff Sgt. Bennie J. Davis III)

higher altitude.

Other enhancements include auxiliary power units, electrical and hydraulics systems, fuel system, fire suppression system, pressurization and air conditioning system, landing gear and airframe modifications. According to Mr. Artuso, these modifications have shown, "demonstrated capability improvements including mission capable rate, time to climb, one-engine out climb, noise compliance and emission compliance."

The modification to Super Galaxy makes the C-5M able to fly four to 12 percent further than any legacy C-5, reducing the need for aerial refueling.

The value of the increased mission capability of the C-5M is its ability to move the 82nd Airborne Division from Pope AFB, N.C. more rapidly and with less aerial refueling than other airframes since it can carry more people and cargo from shorter runways on hotter days, said Mr. Artuso.

The RERP program will modify the 49 C-5Bs, two C-5Cs and one C-5A to C-5Ms by 2016 at a total cost of $7.7 billion.

Mr. Artuso said that early problems in the acquisition process, common to many weapon systems, were successfully overcome and resulted in the C-5 RERP program completing a successful developmental test program with indications of delivering performance beyond initial warfighter expectations.

These upgrades are needed to get the most from taxpayer dollars since a 2007 Office of the Secretary of Defense study determined that a mix of C-5 and C-17 aircraft provided the most cost-effective solution to the nation's strategic airlift requirements.

The C-5 modernization program will produce a more efficient aircraft and C-5 training follows suit with efficient and standardized training across the total force ensuring the capabilities of the C-5 are most effectively employed at home and abroad.

TEACHING

Flying and operating the gargantuan C-5 takes an average crew of seven Airmen: a pilot, co-pilot, two flight engineers responsible for in flight maintenance and troubleshooting and

three loadmasters responsible for securing cargo and passengers. Training the diversified crew always has taken place at a single location. Currently, training for C-5 aircrew for the Guard, Reserve and active duty is the responsibility of the 433rd Airlift Wing, a Reserve tenant unit at Lackland AFB, Texas.

Classroom instruction is conducted by contractor FlightSafety Services Corporation instructors on both AMP and legacy aircraft depending on assignment. The faculty is predominately former C-5 aircrew members who use a variety of teaching methods including classroom instruction, computer-based training, hands-on instruction on the aircraft and flight simulators.

Instruction length varies based on career field and whether students are enrolled in initial qualification or follow-on courses.

"The Flight Engineer Initial Qualification course is about 4 1/2 months, the Pilot Initial Qualification course is about 3 1/2 months and the Loadmaster Initial Qualification course is 2 months," said Bob Starchman, FlightSafety C-5 training manager. "We teach several other follow-on courses but the initial qualification is the schoolhouse's longest course."

Flight engineers, unlike Airmen in many other career fields, are typically cross-trained from other career fields. Most flight engineers come from a maintenance background, though there are exceptions. This foundational knowledge is crucial since, unlike crew chiefs who maintain the aircraft with specialty maintenance Airmen while on the ground; flight engineers are responsible for troubleshooting problems while the aircraft is flying.

"Flight engineers are the bridge between pilots and crew chiefs, the drivers and the repairmen. It's the next step in taking care of the aircraft," said Staff Sgt. Michael Smith, who is stationed at Dover AFB, Del., and who previously maintained aircraft before departure. "I want to take care of it while it's gone instead of getting it ready and sending it off."

The pace and depth of instruction for student flight engineers is demanding. "So far the training has been pretty intense. It's more than what I expected," said Staff Sgt. Jason McClanahan, a Reservist from Wright-Patterson AFB, Ohio.

In addition to teaching Airmen to keep the Galaxy in the sky, 433rd AW instructors also train pilots to get it off the ground.

photo by Staff Sgt. Bennie J. Davis III

Chief Master Sgt. Troy Meridith, chief flight engineer for the 356 Airlift Squadron, conducts Avionics Modernization Program training inside the student learning center. The learning center utilizes photo surrounds, an animated and interactive training module. The 356th AS operates the Air Force Reserve's only formal training unit providing initial and advanced C-5 Galaxy flight qualifications at Kelly Field Annex, Texas.

Since both seasoned and new pilots go through the initial pilot course, the skill sets available vary widely from student to student. Seasoned pilots go through the course for a variety of reasons. Some are learning the C-5 for the first time and come from different airframes. Most come from legacy C-5 weapon systems and are upgrading to the AMP modifications.

Learning AMP for the first time can be difficult for pilots accustomed to the analog instruments of legacy systems. Modern airline pilots and recent graduates of undergraduate pilot training are already familiar with flying in the "glass" cockpits.

"I flew glass on the airline side, so when I came here I was familiar with the glass and just had to find what I was looking for," said instructor pilot Lt. Col. Dane Horstmann. "With someone who never flew glass before, it takes them a little bit longer to find the information. It's like if you drove a car that had a push button radio and then sit in a car with a digital radio. You can work it, but it might take you a minute to find it."

Since there's only so much room in a simulator or cockpit,

photo by Staff Sgt. Bennie J. Davis III

Flight Engineer Instructor Don Burke (left) sits behind the instructor operator controls of a C-5 Weapons System Trainer providing simulated normal and emergency procedures on the ground and flight phases of trainng for flight engineer students Tech. Sgt. Nicholas McFadden (center) and Staff Sgt. Patrick Hansford (right).

photo by Staff Sgt. Bennie J. Davis III

Flight Engineer students enter the C-5 Galaxy Weapons System Trainer for flight training conducted by Flight Engineer Supervisor Wayne Shoberg of FlightSafety Services Corporation (inside). The FlightSafety Services Corporation supplies and supports the WST upgrades associated with the C-5 Avionics Modernization Program or AMP for the U.S. Air Force and helps to train over 2,500 pilots, flight engineers, loadmasters and engine-run maintenance personnel each year nationwide.

instructors typically teach two student pilots at a time. The students are carefully paired with an instructor to maximize the learning environment.

"We try to pair new pilots up with experienced pilots. It allows mentorship among the students and gives them much more instruction," said Mr. Starchman. He added that each student is usually paired with another from a different unit and continues that partnership through the course.

Student pilots learn more than how to get the plane off the ground and keep it flying. They are being taught from the beginning how to employ tactical maneuvers in hostile environments, even flying simulators wearing chemical warfare masks.

"The tactical training has been there for a long time," said Colonel Brandon. "We train in tactics readily now. What we previously taught at the home base, we now have added to the schoolhouse."

Though pilots get the massive aircraft aloft, it's the job of loadmasters to fill and secure cargo that can range from humanitarian aid to Army tanks and helicopters. For loadmasters, class size is kept to four students or fewer and often has a total force mix of fresh-from-basic Airmen and non-commissioned officer cross-trainees. Though it's the shortest of the three initial qualifying courses, it doesn't skimp on instruction.

Courtesy photo

The second fully modernized Lockheed Martin C-5M Super Galaxy test aircraft makes its first flight Nov. 17 from Dobbins Air Reserve Base, Ga. (Lockheed Martin photo)

"[The course] is very fast paced as to the amount of information," said Staff Sgt. Mike Blount. "It's like a fire hose but still able to be picked up."

According to retired Senior Master Sgt. Kevin Kulig, an instructor with 28 years of active-duty service as a loadmaster, the key to learning the material in a short period of time is the desire within the students. As he said, "the students are in the class because they want to be in it. They perform because they want to."

The small student-to-instructor ratio allows the students to learn material on computer-based programs and develop questions to pinpoint particular weaknesses.

"A lot of questions come from the computer and it all goes together when we get hands-on in the cockpit trainer or the ramp-and-door trainer," said Airman Ryan Vonherbulis who recently graduated basic military training. "Whatever questions we have, there's plenty of time to answer them."

"It's not just given; it's actually shown to you so you have a repeatable result," added Sergeant Blount. "If [the instructor] just gives me the answer, I'll have the right answer for that particular problem, but in order to keep on going and come up with my own solutions I need to know how he got to that answer and where to find the information. It's a lot different than any other course I've been in where I was taught to the material. Here they give you a problem and make you find the answer."

Though learning and working in and around the C-5 might seem to diminish its sheer size, its capabilities are not lost on the students who are excited to see what the Super Galaxy adds to an already impressive skill set.

"Looking at the range capability of a C-5, it can make it across the pond without refueling, and the amount of stuff it can carry, upgrading the engines and systems will allow it to go further and bring more material on target," said Sergeant Smith. "When you look at how much equipment a C-5 can bring, how fast it can get there and how many we have, there's no limit to how long we can be in your face."

12 HOURS

DISASTER STRIKES, AIRFIELD OPERATIONS NEEDED WHERE NONE EXIST, WHO CAN FLY IN 12-HOURS?

STORY BY RYAN MATTOX ✪ PHOTOS BY LANCE CHEUNG ✪ DESIGN BY MIKE CARABAJAL

Crumbling buildings, broken sewer lines, downed power lines and people trapped by debris and needing medical assistance can happen anytime, anywhere. No matter what type of disaster, whether caused by acts of nature or humans, the situation can seem overwhelming and wreak havoc on an affected area's infrastructure.

The key to overcoming the effects of a crisis is communication — people talking to people about what they need and how they are going to get that need met as soon as possible. For Airmen at one Travis unit, responding to that need or crisis is their mission and they can do it in 12 hours.

In Air Mobility Command circles, Travis Air Force Base, Calif. is known as the "Gateway to the Pacific." On a daily basis, Airmen coordinate various humanitarian and combat missions, moving cargo and passengers from one location to another in support of U.S. military missions and contingencys around the world.

In AMC, there are two units setup to go anywhere in the world and provide communications support for anyone at a moment's notice. One of those units is the 615th Contingency Response Wing at Travis AFB.

The 615th CRW is a specialized wing that provides a multifunctional and rapidly deployable capability to extend existing AMC infrastructure and respond to crises throughout the world. The Wing's expertise includes setting up air bases, working command and control, running aerial ports, performing aircraft maintenance, and providing security and communications.

The 615th CRW's primary mission is to employ cross-functional teams to quickly open forward air bases in an expeditionary environment to meet combatant commanders' needs. The 615th CRW reports to the 15th Expeditionary Mobility Task Force, also located at Travis.

The unit provides support using a communications package of satellites, computers, phones, radios — anything needed to

Always ready, Senior Airman Jonathan Lehman and Staff Sgt. Daniel Weinfurter verify battery inventory in a flyaway kit continuity book at Travis Air Force Base, Calif. Airman Lehman and Sergeant Weinfurter are with the 570th Global Mobility Squadron assigned to the 615th Contingency Response Wing. The 615th and it's sister unit at McGuire Air Force Base, N.J., open forward bases and extend existing Air Mobility Command infrastructure via rapid forward deployment capabilities. CRWs employ mission-ready airfield assessment teams, airfield operations, command and control, aerial port, and aircraft maintenance personnel, as well as airlift, weather, medical, intelligence, air traffic control, security forces, finance, fuels, supply and contracting personnel to project and sustain forces worldwide.

During a proficiency exercise, 570th Contingency Response Group Airmen set up an operational site at Travis Air Force Base, Calif. At Travis, three response groups maintain a 4-month alert cycle. Airmen of the CRW are ready to deploy anywhere within 12 hours of receiving a tasking.

communicate with anyone in the world. The unit can be ready to leave Travis AFB within 12 hours of notification and be fully operational within 12 hours upon arrival at the deployed location. The unit's Airmen provide any communication need any mission may require from secured and unsecured e-mail and Internet to air-to-ground communications.

Currently, the 615th CRW's sister unit has equipment in southern Africa, but it is operated by Airmen from Travis. The equipment is called Deployable Air Mobility Division Communications Element.

"If they have a radio, we can talk to them," said Staff Sgt. John Hudson, 15th Air Mobility Squadron communications technician.

The unit has the whole radio communications spectrum covered.

"We provide so much for such a small footprint, and we provide a lot of service for our size," he said.

The unit is designed to support any type of situation needed. The Airmen have supported major operations such as Operations Enduring Freedom and Iraqi Freedom, presidential movements, tsunami support, hurricane response, flood relief and wildfire support. Last year, the unit provided support for President Bush. They were also involved with evacuation and relief efforts for Hurricanes Gustav and Ike.

"Last fall, when we were tasked to support Hurricane Gustav and Hurricane Ike, our team and equipment were ready to go in four hours," said Lt. Col. Laura Lenderman, 15th Air Mobility Operations Squadron commander. "It's really a unique AMC and Air Force capability; we can provide this facility and communication package anytime, anywhere."

DACE is usually comprised of five personnel, each providing a unique Air Force Specialty Code or skill set – radios, voice, data, circuit control and satellite. Maintaining a scalable and interchangeable posture allows the unit the capability of working in any type of environment.

With five Airmen assigned, the unit spends a lot of time cross-utilizing those skills. Training allows the unit to maximize the talents of those assigned to reduce the initial Air Force footprint created, doing more with less.

"All of us train on the basics of each other's jobs, meaning we will do basic function checks on equipment or systems, but if I can't fix it, I get the subject matter expert maintainer whose job it is to fix it," said Senior Master Sgt. William Mason, flight chief, 15th AMOS integration flight.

Senior Airman Joshua Esparza performs a pre-flight inspection of a C-17 Globemaster III. Airman Esparza is a crewchief assigned to the 672nd Global Mobility Squadron, Travis Air Force Base, Calif. Airman Esparza is also qualified on the C-5 Galaxy.

In the field, the unit usually operates out of a hard-walled deployable shelter system, providing 2,592 square feet of floor space, environmental control units and generators, along with a crew of seven civil engineers. However, living conditions are dependent on the mission and location.

"It all depends on where we are, who we are working for and what we are doing. We could be living like kings or we could be living like the lowest peasants," said Sergeant Hudson.

After arriving at the deployed location, everyone jumps in and sets up shelters and equipment. Shortly thereafter, the Airmen spend most of their time operating like a communications squadron at home station.

"At the front end of the deployment, we are up for hours, getting dirty, running wires, setting up shelters," said Sergeant Mason. "When we are all set up, it's all about maintaining the equipment. But if you see us running around after initial setup then something is wrong. Just like any base infrastructure, if it isn't broke, then you don't see us."

Last fall, when we were tasked to support Hurricane Gustav and Hurricane Ike, our team and equipment were ready to go in four hours. — Lt. Col. Laura Lenderman

Staff Sgt. Elizabeth Clingan gives the "clear" signal to the loadmaster inside a C-130 aircraft from the 192nd Air National Guard. The aircraft was flown to Travis Air Force Base, Calif., to pick up a three-person team from the 36th Contingency Response Group in Guam and a Travis team plus truck and trailer unit from the 615th Contingency Response Wing. Once the vehicle was loaded, the teams boarded and departed for Southern California, where they trained with U.S. Army forces.

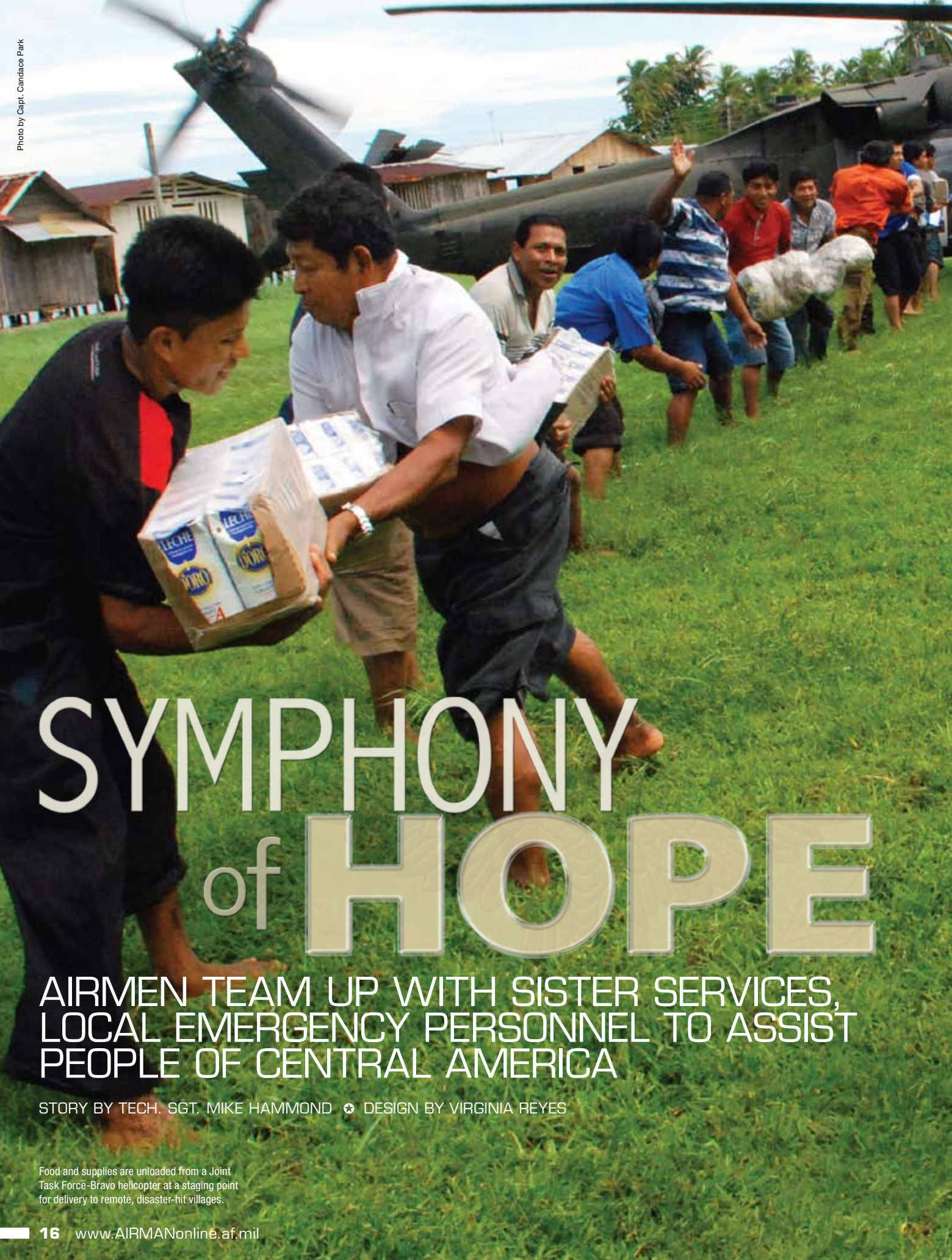


Photo by Capt. Candace Park

SYMPHONY of HOPE

AIRMEN TEAM UP WITH SISTER SERVICES, LOCAL EMERGENCY PERSONNEL TO ASSIST PEOPLE OF CENTRAL AMERICA

STORY BY TECH. SGT. MIKE HAMMOND ✪ DESIGN BY VIRGINIA REYES

Food and supplies are unloaded from a Joint Task Force-Bravo helicopter at a staging point for delivery to remote, disaster-hit villages.

Life in Central America can be tough. The region is blessed with amazing natural beauty and rich with cultural treasures, but the challenges are real, and constant. The people face rampant poverty, escalating violence, natural disasters and a lack of available medical care that is taken for granted by many in the United States.

For more than 275 Airmen assigned to Joint Task Force-Bravo at Soto Cano Air Base, Honduras, these challenges present an opportunity to roll up sleeves and make a real difference in people's lives.

JTF-Bravo is U.S. Southern Command's agile-response force in the Central American region. It is poised to respond alongside host nation emergency officials to natural disasters like flooding, earthquakes and hurricanes. The task force also partners with each nation's ministry of health to coordinate medical services in the form of medical readiness training exercises, which give local people access to medical treatment and allow providers to practice medicine in austere conditions. In addition, members of the JTF conduct subject matter expertise exchanges, where they train side-by-side with their counterparts in local government agencies.

The response capabilities and efforts to build true, lasting partnerships with Central American governments are all part of a larger effort to promote regional security, stability and prosperity, all of which can be threatened at any moment.

WHEN DISASTER STRIKES

It was 8 p.m. on a cool, breezy Thursday evening at Soto Cano. Airmen, Soldiers and Sailors were unwinding in anticipation of the weekend to come. But just as the weekend's plans were being discussed, disaster struck some 330 miles to the south. A magnitude 6.1 earthquake rocked the nation of Costa Rica and the call for help came in to the joint operations center.

In short order, key players gathered together to plan the response package which would include medical workers, rescue workers, command and control, and the aviators of the Army's 1st Battalion, 228th Aviation Regiment who fly the JTF's HH-60 Black Hawk, UH-60 Black Hawk, and CH-47 Chinook helicopters.

After SOUTHCOM officials and the JTF-Bravo commander approved the operation, 34 JTF-Bravo members, four helicopters and vital supplies lifted off from the flightline here to help neighbors in need, only 24 hours after the initial quake.

Upon touching down at ground zero, the responders took in the devastating scene: roads and bridges completely gone, homes reduced to piles of rubble, gaping cracks in the earth's surface, and a car buried under a mountain of earth, an occupant's lifeless arm outstretched from the dirt. It looked like a scene out of a Hollywood disaster movie, only very real, and with real lives hanging in the balance.

Over the next several days, the JTF-Bravo crews worked with personnel from the Costa Rican National Emergency Commission, a government agency comprising 150 experts trained to respond to natural disasters. They evacuated 90 people, including some wounded, working to save life, limb and eyesight of those whose lives had literally been turned upside down.

"The response to the Costa Rican earthquake was a prime example of how the regional cooperation JTF-Bravo is here to promote pays dividends in times of emergency," said Army Lt. Col. Chad Reiman, director of operations for JTF-Bravo, pointing to the various government and non-government agencies that worked with United States forces to help.

The colonel's sentiments were echoed by CNE official Xenia Guerrero Garita.

"We appreciate the support of the U.S. military in this operation," said Ms. Garita. "The capability for helicopter airlift (that) Joint Task Force-Bravo is contributing allows us to better respond to help the people affected by the disaster. It's a very complex job, but

Photo by Tech. Sgt. Mike Hammond


Photo by Army Spc. Ethan Anderson


Photo by Tech. Sgt. Rebecca Daniel

(Left) Joint Task Force-Bravo and Honduran firefighters set up a water hose to cool an overturned fuel tanker. (top right) An elderly gentleman begins the process of cleaning his home after a tropical depression. (bottom right) Joint Task Force-Bravo delivers mattresses after a disaster. More than 200 mattresses were delivered to three villages.

a beautiful job," said Ms. Garita, who has worked for CNE for 17 years. "The beauty is so many agencies are integrated and working together to provide a quick, life-saving response."

In addition to the Costa Rica earthquake, other natural disaster responses in the recent past have included rescuing stranded people from widespread flooding in Honduras, Costa Rica and Panama.

The partnership and cooperation between U.S. and Central American officials exists daily, not just when disaster strikes. Through this partnership, the JTF-Bravo members work to promote regional stability to the United States' south.

PARTNERSHIP FOR STABILITY

The 38 Airmen assigned to the 612th Air Base Squadron's fire department are no strangers to the "bomberos" – Honduran firefighters – in the local town of Comayagua. That's because they regularly train together in what JTF-Bravo calls subject matter expertise exchanges. The U.S. firefighters, by working with their Honduran counterparts, are able to share techniques and practices that work for them, while learning from the bomberos about their experiences and equipment as well.

This familiarity can pay off at any moment, and it often does.

Early one April morning, traffic moved along as usual on the outskirts of Comayagua on CA-5, one of Honduras' main thoroughfares. Suddenly, a horse trotted into the road, right in front of an oncoming vehicle. With no time to react, the vehicle hit the animal at highway speeds, sending the carcass directly into the path of a tanker truck hauling more than 11,000 pounds of highly flammable butane gas. The truck jackknifed and flipped over onto its side, blocking the road and presenting the very real danger of a massive explosion at any moment.

Among the first on the scene were 10 Air Force firemen from the 612th ABS. They joined with Honduran emergency responders and other JTF-Bravo members from the medical element and security forces to secure the scene, establish a large cordon and spray water on the butane tanker to keep heat and pressure from building up to an explosion. Soon the Airmen and Hondurans determined a crane must be brought in to safely, and slowly right the tanker. But with traffic snarled for miles and no alternate route available, getting a crane to the scene was going to be a long and difficult undertaking.

Hours passed as the crane made its way to the scene from a faraway town. Honduran and Air Force firefighters took turns keeping the tanker cool, and those with down time compared firefighting tattoos and looked at each others' trucks and gear. There was no language barrier in a time like this; the fireman culture was a common bond.

Finally, the crane arrived. After many tense moments, while fearing the movement would spark a devastating explosion, the tanker righted and completely drained of butane to an empty tanker brought in for that purpose. The incident was resolved with no serious injuries, beyond the death of the horse.

"Our continuing partnership with our host nation allows us to respond to requests for help at a moment's notice," said Air Force Lt. Col. Chad Butts, 612th Air Base Squadron commander. "Since we regularly exercise with the local fire departments we are able to roll right in with our equipment and personnel to support their efforts at the incident scene.

"Our ability to host conferences for Central American bomberos has provided several benefits for all participants," Colonel Butts said. "These conferences provide us with a different perspective and appreciation for the way that they do their job. Hopefully they leave the conferences with a mutual feeling of respect for our firefighters."

Beyond paying off in times of emergency, this type of cooperation also results in improved quality of life for the local population.

Airmen, Soldiers and Sailors regularly team up with members of governmental agencies like the Honduran Ministry of Health, and volunteer organizations like the U.S. Agency for International Development to provide humanitarian assistance to those in need.

Almost monthly, volunteers from JTF-Bravo backpack to remote villages in the mountainous region around Soto Cano, each carrying 40 pounds or more of food and supplies to deliver to the people living there. For these people, dinner plans never include a trip to a fast food restaurant. And for them, a trip to the grocery store might entail an all-day hike through rugged terrain. The people do what they can for food: minor farming efforts, foraging for natural foods in the woods and making a little go a long way.

When the team of volunteers arrives, the excitement is electric. Children come running, hoping for not only food, but the toys and candy members are known to bring along with them. Mothers and fathers line up to receive their rations with faces lined by the weather and a lifetime of struggle, but gratitude and appreciation in their eyes.

By living in remote areas often without power, running water or proper sanitation, health issues are a constant concern for the people of Central America. Fortunately, Joint Task Force-Bravo members arrive in the region with the skills, equipment and desire to help improve the health of the people as well.

JUST WHAT THE DOCTOR ORDERED

A Panamanian woman crossed the border into Costa Rica on a narrow strip of mountainous terrain, known as Punta Burica, which juts into the Pacific Ocean. She traversed a makeshift swing bridge, and after a nearly two-hour journey on foot, she changed out of her traveling clothes into her nicest outfit, a hand-sewn purple dress zigzagged with yellow and blue thread.

Here, it is important to look your best when you go to see a doctor. This day was a special occasion, as she and her family would receive medical care for the first time in nearly two years.

The woman arrived in the small indigenous "Ngobe" village, population 160, just as a UH-60 from Joint Task Force-Bravo, touched down between two wooden goal posts in the village's soccer field.

The doors of the helicopter opened and uniformed servicemembers from JTF-Bravo exited carrying medical supplies and equipment for the three-day medical readiness training exercise.

The visit of this JTF-Bravo Black Hawk and its passengers is what the village's leader, Kanaki Carrera, called "a dream come true."

Because there are no roads leading to the three remote villages in the area, receiving medical, dental and preventive medicine from JTF-Bravo and the Costa Rican Social Security Health Services here during this exercise is "truly a prize," Mr. Carrera said.

He explained many of the people in the area have not seen a doctor for several years and the journey to the nearest Costa Rican hospital is two days through treacherous terrain littered with poisonous snakes.

"Unfortunately, the conditions of the journey make it impossible for many people to see a doctor and they die trying," he said. "We are very thankful for the support of (JTF-Bravo) to this humble community. It is something very kind."

With the help of partner Costa Rican health professionals, 10 members from JTF-Bravo's medical element saw nearly 600 patients during three days at this site and at La Pena, another remote village about eight miles away.

For four local women, the benefits of the MEDRETE were immediate and once-in-a-lifetime because of the medical evacuation capability presented by the U.S. and Costa Rican helicopters.

The doctors present said one woman would have lost a finger without the transport of the Costa Rican police helicopter to the hospital in Golfito; three pregnant women in need of specialized care also were transported to the hospital via the U.S. military's Black Hawk.

For Jose Rodriguez, a 24-year-old father of two infants, the visit of JTF-Bravo medical personnel to his village is a blessing he has been praying for.

"I thank God for this help," Mr. Rodriquez said. "I hope these medicines and vitamins will help me feel better and my children will feel good and live a better life because of this."

By forging partnerships, practicing teamwork and helping those who need it most, the Airmen, Soldiers and Sailors of Joint Task Force-Bravo prove daily that an assignment to Soto Cano AB is more than a regular job. It's a chance to make a difference in the lives of the United States' neighbors and make it possible for people like Mr. Rodriquez and his children to hope for a brighter future.

Editor's Note: *Capt. Candace Park and Tech. Sgt. Rebecca Danet contributed to this article.*

(Left) Tech. Sgt. Tracee Fletcher, carries a 7-month-old baby suffering from severe dehydration, from a UH-60 Black Hawk helicopter to an awaiting ambulance. Joint Task Force-Bravo assisted with recent flooding caused by prolonged heavy rains. (Right) Local children wait to receive backpacks distributed by Joint Task Force-Bravo and Backpack Foundation volunteers. Nearly 700 backpacks were delivered to five schools in only two days.

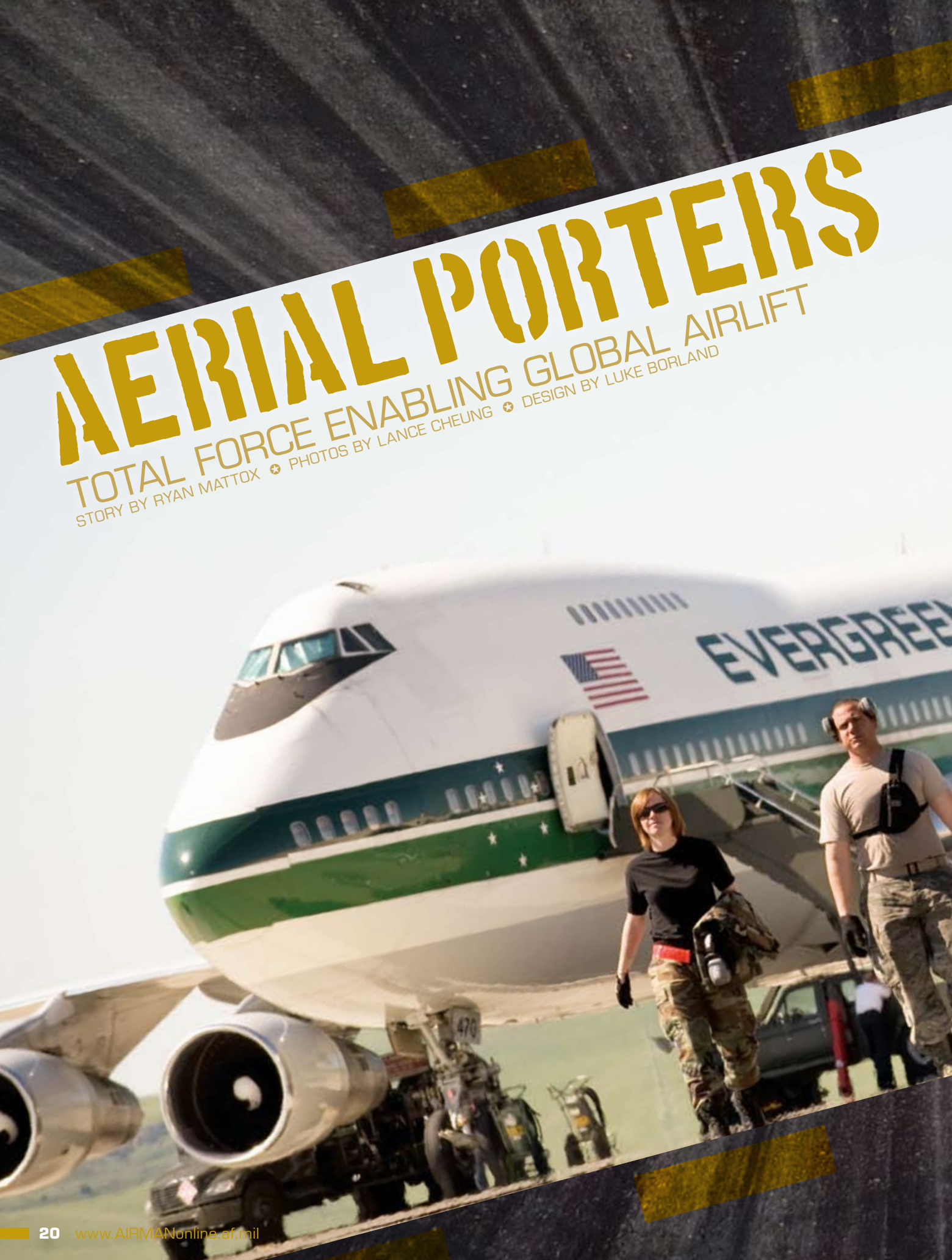
Photo by Capt. Candace Park

Photo by Spec. Christopher Wellner

AERIAL PORTERS

TOTAL FORCE ENABLING GLOBAL AIRLIFT

STORY BY RYAN MATTOX ✪ PHOTOS BY LANCE CHEUNG ✪ DESIGN BY LUKE BORLAND



Aerial porters (from left) Airman 1st Class Elizabeth Brown, Senior Airman Devin Mayhair, Airman 1st Class Mitchell Drummer, of the 60th Aerial Port Squadron at Travis Air Force Base, Calif. and Senior Airman Daulton Abernathy an Air Force Reservist assigned to the 69th APS, Andrews AFB, work with an 11-person ramp team to fill 42 pallet positions in the contract air cargo jet from Evergreen's 747 Freighter at Travis. The cargo jet will make stops at Hawaii, Guam, South Korea and Japan. The team safely loaded 99,585 pounds of cargo in 90 minutes.

On the west coast of the United States lies one of Air Mobility Command's busiest flightlines, Travis Air Force Base, Calif. The sheer number of flights launched from the "Gateway to the Pacific" on a daily basis keeps a Total Force team of Airmen hopping around the clock. Operations on the Travis flightline function much like other airports except for the volume. Airmen at this northern California

Staff Sgt. Sherlyn Wilson checks the netting on a pallet bound for Hickam AFB, Hawaii, from Travis Air Force Base, Calif. She is on the first level of the two-story pallet storage system that features an Elevated Transfer Vehicle. The track mounted ETV utilizes motorized rollers to make fast work of retrieving the dozens of pallets that will fill large-body cargo planes that come in and out of Travis AFB.

Always moving, Senior Airman Mark Hedge, Airman 1st Class Grant Fountain, and Senior Airman Andrew Bluman strap down paneling and building materials to a pallet. They are air transport specialists with the 60th Aerial Port Squadron.

Moving outsized cargo, Senior Airman Andrew Bluman holds a measuring stick while Airman 1st Class Grant Fountain operates an Elevated Transfer Vehicle. After measuring, the palletized cargo will be moved down the row of pallet racks and organized into the proper order of load.

base handle more cargo and passengers than any other military air terminal in the Air Force.

In 2008, Airmen at Travis moved more than 50,000 tons of cargo through their doors, processed more than 43,000 passengers through the passenger terminal and launched nearly 5,400 missions from their flightline.

Each day these Airmen make sure cargo and passengers are loaded efficiently and safely onto the aircraft and ensure they are ready to go on time. On the flightline, they are known as aerial porters or air transportation specialists.

At one end of the flightline, porters unload cargo from arriving aircraft or truck to take to a warehouse for processing. After that, it's loaded onto waiting aircraft. At the other end of the massive flightline, aerial porters ticket passengers and palletize their luggage at the passenger terminal.

Collecting, organizing, weighing, loading and a multitude of other tasks related to efficiently moving cargo takes a highly-trained and motivated force, and in this case it is a team made up of both Air Force Reserve and active-duty Airmen, working side-by-side to get their mission done. The main components of the team come from the 45th, 55th and 82nd Aerial Port Squadrons of the Reserve. The active-duty contingent comes from the 60th APS. Together they operate the terminal day and night.

The 60th APS is part of the 60th Air Mobility Wing. The wing is the host unit for Travis AFB and is the largest air mobility organization in the Air Force. It has a versatile all-jet fleet of C-5 Galaxy and C-17 Globemaster III cargo and KC-10 Extender refueling aircraft. The unit's primary roles are to provide rapid, reliable airlift of

American fighting forces anywhere on Earth in support of national objectives and to extend the reach of American and allied air power through mid-air refueling. Wing activity focuses in the Pacific and Indian Ocean area, including Alaska and Antarctica. However, 60th AMW crews can fly support missions anywhere in the world.

The Reserve aerial port squadrons fall under the 349th AMW, also at Travis. Airmen of the 349th, the largest associate wing in Air Force Reserve Command, fly the C-5 Galaxy, KC-10 Extender and the C-17 Globemaster III in addition to other missions. They use these aircraft to transport people and materiel worldwide as well as refuel a wide array of airframes. The wing, made up of nearly 3,500 Reservists, in work side-by-side with their active-duty counterparts.

Both units are in partnership to provide combat-ready Airmen and expeditionary support to the warfighter.

"We are supporting the overall mission of the Air Force. At the unit level we are training our members to do the job, and then we have requirements in support of the active-duty and the Air Force mission. That's what we do. It's global," said Master Sgt. Mark Edger, 55th APS air transportation standards and evaluation evaluator.

This partnership began in 2004 when Reserve and active-duty units began working together at this terminal. The two teams together became fully-integrated and built their partnership to what it is today.

"It took us some work and time to get the communication working and build the relationship between us," said Chief Master Sgt. Buford Hadley, 55th APS air transportation manager. "Understanding the active-duty world versus the Reservist world, you want to talk Total Force. At this port, we have Total Force. This is a Total Force base. I have never experienced this before. It is not us and them, it's us. We have a team here. We are 'Port Dawgs.'"

While training and working together, this team blends together, creating such a seamless team that even those who work on the flightline often can't tell the difference between active and Reserve Airmen.

"I think the 55th, especially as a Reserve unit, has proven itself to the active duty that we are willing to get in and do whatever it takes," said Master Sgt. Scott Bryant, 55th APS assistant NCO in charge of cargo. "As a unit the 55th has made a name for itself. We are with you guys now. Show us what you need done and we will work hard to get it done."

Every day aerial porters are busy inspecting and processing shipments with hazardous items, weighing vehicles, figuring out the most efficient way to load cargo onto an aircraft and determining proper load configurations based on airframe. The goal for these Airmen is to process passengers, tons of cargo and keep Soldiers and Airmen off the roads by reducing the need for convoys.

With the amount of traffic Travis sees in a year, these aerial porters sometimes process unusual cargo and passengers.

In November 2007, Maggie, an elephant, was transported from Elmendorf AFB, Alaska, to Travis for a quick stop before arriving at her final destination at the Performing Animal Welfare Society, an animal sanctuary near San Andreas, Calif.

Several years ago, in 1998, a KC-10 launched from Travis to refuel a C-17 carrying a killer whale. The whale was "Free Willy" star Keiko, who was transported to Heimaey, Iceland, from Oregon after 19 years in captivity and a brief career in the movies.

More recently, a body believed to be a World War II Airman was found frozen in the Sierra Nevada Mountains in California. The remains were airlifted from Travis to Hickam AFB, Hawaii, for examination at the Joint POW-MIA Accounting Command.

Sometimes cargo or passengers need to travel in a hurry. In August 2005, two unmanned, remote-controlled vehicles were sent from Travis to Russia's Pacific coast in an effort to save seven Russian sailors aboard a mini-submarine that sank after its propeller became entangled in either a fishing net or steel cables.

"We don't just move cargo. We are also involved in a lot of contingency operations," said Chief Hadley. "We formed an honor detail to pay the proper respects for the World War II remains before sending them on to Hawaii for identification. We also processed the equipment for helping save the Russian sailors trapped in their sub."

On the West Coast, whether its elephants or unmanned remote-controlled submarines, chances are that cargo has passed through this air terminal at Travis AFB.

When cargo arrives at Travis, depending on the type, it can go to one of two places: the air freight terminal or the passenger terminal.

At the air freight terminal, cargo arrives either by truck or aircraft. It is then processed into a tracking system and assigned to a bay, depending on where it's going and how it's going to get there. When it is time to move the cargo, Airmen use a vehicle that can move palletized cargo from shelves to the docks. This vehicle is called the ETV, an electronic transfer vehicle.

Passengers, Staff Sgt. Elsie Garza and Jazlene (3 weeks old) wait in the passenger terminal at Travis Air Force Base, Calif., to board a bus that will take them to a waiting C-5 Galaxy heading to Hickam Air Force Base, Hawaii. Sergeant Garza is assigned to the 37th Mission Support Squadron, Lackland Air Force Base, Texas. and is on leave and using the "space available" travel privilege to fly on a cargo mission.

The ETV is a crane-like vehicle that rides on rails back and forth between two stacks of shelves that hold cargo for shipping. The vehicle moves pallets from the warehouse to the docks where they are then loaded onto a large truck with a conveyer system called a K-loader. Aimen operating the K-Loader transport the cargo to the aircraft. The warehouse is also a shipping point for cargo brought into the facility for processing and delivery by truck.

When an aircraft is ready for its cargo, aerial porters use a load plan to determine where the cargo will be placed inside the airframe. When developing the plan, an experienced porter

uses the weights and measures of all the pallets, vehicles and other equipment in a series of complex calculations determining how his team will load the cargo. It all must be sequenced with precision to ensure efficiency and safety. Each aircraft has a certain amount of cargo space available and the porter creating the load plan has to know the specifics of the airframe for which he is planning the load. The plan also provides information about the cargo, whether it's beans and bullets, a helicopter fuselage, an Army tank or even hazardous material. The aerial porter needs to know these important details and must be able to communicate them to the aircrews and to the porters on the receiving end.

A proper load plan is essential to aircrews as well. Cargo that is improperly loaded can cause the aircraft to fly inefficiently. Too much weight in the wrong place or not correctly balanced can cause the aircraft to use too much fuel or not meet the launch-weight restrictions. Loadmasters work closely with the porters, as they become responsible for the cargo in flight.

"We have to meet a sequence of events. We have to have the cargo at the aircraft at a certain time, we have to load it in a certain amount of time and the aircraft leaves at a certain time," said Senior Airman Devin Mayhair, 60th APS team chief. "If we are slow on the upload it comes back on us, and we don't look good out there. So sometimes we have to hoof it to get the job done."

When everything works according to plan and the aircraft is leaving on time it gives the aerial porters a sense of accomplishment.

"The best thing about being an aerial porter is you get to meet a lot of people and get to load important cargo. Especially if it is to save a warfighter's life, then we need to get that stuff out of here as soon as possible," said Airman Mayhair.

At the other end of the flightline, the passenger terminal stays just as busy with travelers coming to Travis AFB looking for flights to the Pacific. Aerial porters working here spend their days moving luggage and helping people get to their desired destinations.

The 60th AMW's passenger terminal is a hot spot for anyone who wants to fly Space-A to destinations in the Pacific. Last year aerial porters helped 43,486 people get onto flights leaving Travis.

To get these passengers moving, aerial porters must act as ticket agents, customer service representatives, baggage handlers and customs agents.

"I make sure we are providing the best customer service we can provide, and I help solve issues with passengers and flights that rise from time to time," said Master Sgt. Marvin Jenkins, 55th APS superintendent. "

However, the terminal is much more than a Space-A hub. This section also helps process units deploying to contingency operations around the world.

"We get a lot of units deploying through our terminal here and with our own units like 615th Contingency Response Wing. We help get them out to their destinations too," said Sergeant Jenkins.

Even though aerial porters are busy moving cargo and passengers all day long, another aspect of an aerial porter's day is training. With a heavy Reserve involvement on the flightline, a lot of training is conducted around the clock all year long.

"They come here. They train hard, and if it weren't for them being here we [active duty] would be working 12 hours-a day for five or six days a week. With these guys here, it's great," said Staff Sgt. Chad Shaver, 60th APS cargo export supervisor. "They help us out. It took me a year before I knew some of these guys were Reservists."

Since training plays a key role in all aspects of aerial port missions, it has eliminated any division and created a seamless Total Force team.

Marine Sgt. Destin Waldron is the top side spotter on a UH-1Y the latest marine aircraft based on the workhorse "Huey" utility helicopter as it is winched into an Air Force C-5 Galaxy. The test was used to determine the ramps and positions required to safely load and transport these aircraft and the new AH-1Z Super Cobra. Shipments to overseas contingency operations are expected to begin by the end of 2009.

"We don't train to be Reservists. We train to perform the mission on an active-duty status. When active-duty Airmen are tasked and are stretched thin manning wise, we jump in and backfill here and also take on deployments," said Chief Hadley.

It is more than training and working long hours that makes this group click. It's family.

Senior Master Sgt. Kevin Brown is the 55th APS ramp superintendent and has been an aerial porter for 29 years. He said being an aerial porter is all about people and family.

"It is the people who make the squadron, because APS troops tend to stay," he said. "It is family first here and then mission. They took me in and trained me to be a part of their family. The first time I went out to load a plane was the second I knew I was in the right spot. I enjoy my job because this is where I grew up and learned the discipline that was needed to not just load planes and drive equipment, but also someplace I could be a part of something bigger than myself. It's not just loading planes, it's serving my country. For me it's not a sprint, it's a marathon; that is why I enjoy my job."

It makes no matter whether they are working with retirees trying to get to the Philippines or a unit deploying to the other side of the world or even an elephant moving to greener pastures, it is this family of aerial porters who gets that mission done.

AIR TRANSPORTATION SPECIALIST

Senior Master Sgt. Kevin Brown

photo by Lance Cheung

"It's been my absolute privilege to serve my country for the last 29 years as an aerial porter. The first time I went out to load a plane was the second I knew I was in the right spot. I enjoy my job because this is where I grew up and learned the discipline that was needed to not only load planes and drive equipment, but it was also a place where I could be a part of something bigger than myself. It's not just loading planes it's serving my country."

HOME UNIT/BASE:
55th Aerial Port Squadron, Travis Air Force Base, Calif.

HOMETOWN:
Oakland, Calif.

ENTERED AIR FORCE:
Sept. 9, 1979

PRIMARY AFSC:
2T2XX - Air Transportation

PUSHING TIN

618TH TANKER AIRLIFT CONTROL CENTER PUTS AIR MOBILITY ASSETS WHERE THEY'RE NEEDED, WHEN THEY'RE NEEDED

STORY BY STAFF SGT. MATTHEW BATES ✪ PHOTOS BY STAFF SGT. DESIREE PALACIOS ✪ DESIGN BY LUKE BORLAND

The 618th Tanker Airlift Control Center is the global air operations center responsible for centralized command and control of Air Force and commercial contract air mobility assets 24 hours a day. It plans, schedules and tracks tanker, airlift and aeromedical evacuation aircraft worldwide to efficiently and effectively accomplish AMC's Global Reach mission.

Tech. Sgt. Gary Bass, on the right, plans and schedules cargo and personnel traveling around the globe while Lt. Col. Frank Whorton is coordinating arrangements for a broken aircraft in Germany. Sergeant Bass is an aerial port controller and Colonel Whorton is the Chief of the Logistics Readiness Division assigned to the 618th Tanker Airlift Control Center.

90 seconds.

Not much happens in such a small amount of time.

A stoplight might turn from green to red, a person might decide which value meal to purchase at the local fast food chain or someone might type out an e-mail to a colleague.

But most people won't accomplish much in 90 seconds.

Unless those people are part of Air Mobility Command , and its 24-hour operations hub including the 618th Tanker Airlift Control Center at Scott Air Force Base, Ill. For them, 90 seconds isn't just a block of time, it's a number with meaning.

Because, every 90 seconds an AMC aircraft is scheduled for take off. An aircraft carrying fuel, cargo or people needed somewhere in the world. It could be a C-17 Globemaster III carrying a Mine Resistant Ambush Protected vehicle to explosive ordnance disposal teams in Afghanistan or a KC-10 Extender carrying much needed fuel to F-15E Strike Eagles providing close-air-support to troops on the ground in Iraq.

But, no matter the type or cargo it carries, every 90 seconds an aircraft is on its way, headed where it's needed – all thanks to the men and women of AMC and the 618th TACC.

"An Air Mobility Command [mission] takes off every 90 seconds from locations all around the world," said Maj. Gen. Mark S. Solo, 618th TACC commander. "Whether it's evacuating injured troops, delivering supplies to our forces on the ground, performing humanitarian operations or providing air-to-air refueling, the 618th TACC plays a key role in our military's operations every day."

The 618th TACC, located in the Air Mobility Command headquarters building, is the global air operations center responsible for centralized

Master Sgt. Don Crawford talks on the phone to organize an aerial refueling in-flight mission. Sergeant Crawford is the tanker global operations director assigned to the 618th Tanker Airlift Control Center.

"It takes a lot of time and effort by a lot of people to accomplish these types of numbers" — Col. Kurt Peterson

photo by Senior Airman Ricky J. Best

Parachutes begin to open as supply pallets are airdropped from a C-17 Globemaster III to servicemembers at a remote camp in Afghanistan. The 618th Tanker Airlift Control Center stands ready around the clock to coordinate airdrops like this.

photo by Staff Sgt. James L. Harper Jr.

Aircrew members load an M777 A2 Howitzer onto a C-130J Hercules March 14 at Bagram Airfield, Afghanistan. The TACC accomplishes the planning, scheduling and directing of more than 1,300 mobility aircraft performing missions like this on a daily basis.

Airmen assigned to the 618th Tanker Airlift Control Center at Scott Air Force Base, Ill., coordinate daily with other stations to ensure cargo and troop missions are moving on time.

command and control of Air Force and commercial air mobility assets, 24 hours a day, seven days a week.

The men and women assigned to the control center never touch an aircraft in this assignment, but the majority of them are experienced aircrew members, maintainers, aeromedical evacuation experts and aerial porters. And as AMC's hub for global operations, they have a hand in virtually every operational airlift, air refueling and aeromedical evacuation mission that takes place anywhere in the world.

The center accomplishes this by planning, scheduling and directing a fleet of more than 1,300 mobility aircraft in support of combat delivery and strategic airlift, air refueling and aeromedical evacuation operations around the globe.

"It's a busy center, that's for sure," said Lt. Col. Christopher Rosenthal, chief of the 618th TACC's Command and Control Global Operation Division.

On a typical day, the nearly 700 people assigned to the center coordinating hundreds of airlift, air refueling and aeromedical evacuation missions, moving nearly 2,000 tons of cargo and more than 5,300 passengers globally.

"We plan missions, resource the crews and the aircraft, task the missions to the wings and command and control the missions from here," General Solo said.

But while planning is paramount, flexibility is a must.

"You never know what can happen on a day-to-day basis," Colonel Rosenthal said. "We might have to help wildfire efforts or provide support to flood victims or some other mission that springs up."

To do this, the center seamlessly redirects its assets to support these "unplanned" events, such as contingency operations or humanitarian relief efforts.

"There's basically no mission we can't do, so we have to be ready and able do them," Colonel Rosenthal said.

Still, the bulk of the 618th TACC's mission planning is in support of Operations Iraqi and Enduring Freedom. And the numbers prove it.

Since Sept. 11, 2001, Air Mobility aircraft, many directed by the 618 TACC have flown more than 1.2 million sorties, moved 4.5 million tons of cargo, passed 1.5 billion gallons of fuel via air-to-air refueling and performed more than 130,000 patient movements.

While these numbers are impressive, they are not the ones the center's personnel are concerned about. They care more about the intangibles: the hours they save aircrews by planning missions, the smiles they bring to deployed troops because they got those letters from home or the lives saved because of the delivery of MRAP vehicles.

None of this – neither the statistics or the intangibles – would be possible without the men and women who sit long hours behind computer screens and on the phones at the 618th TACC making it happen.

"It takes a lot of time and effort by a lot of people to accomplish these types of numbers," said Col. Kurt Peterson, Reserve advisor to the 618th TACC. "But we have a lot of dedicated professionals manning the center. It's a solid team."

One reason this "team" works so well is because of its makeup. It's a virtual melting pot of ranks, experience levels, career specialties and ages. The center's personnel are also a mix of active duty, Reserve, Air National Guard, contractor and civil service personnel – each of whom bring a unique perspective and set of talents to the table.

"Having such a mix of people working together makes us better," Colonel Peterson said. "We can draw from each others experiences and knowledge to work smarter and more efficiently."

"The men and women at the 618 TACC are very good at what they do," General Solo said. "We have a lot of pride in this mission because we are launching our nation's airlift, air refueling and aeromedical evacuation missions and see the impact that those missions make every day."

It's an impact felt around the world. Because of what the 618th TACC does, boots hit the ground in places like Iraq and Afghanistan, wounded servicemembers get the medical care they need and fuel keeps aircraft of all types in the air and on mission.

It's a rewarding, yet endless job. The work at the center doesn't stop.

Phones are never silent; computer monitors are never turned off; the building is never empty.

"We have a mission that we've got to support every day," General Solo said. "There are two wars that we must support, plus hotspots around the world. We're providing support to theater engagement plans, to combatant commanders around the world and to exercises."

And every 90 seconds an AMC mission, many controlled by the 618 TACC, takes off to ensure these missions happen.

90 seconds isn't a lot of time, but for the men and women of AMC and the 618th TACC, it's more than enough.

REFUEL

TANKERS, CREWS SUPPORT AIR FORCE'S AIRPOWER CAPABILITIES, STRATEGIES

STORY BY STAFF SGT. MATT BATES ✪ PHOTOS BY STAFF SGT. DESIREE N. PALACIOS ✪ DESIGN BY MIKE CARABAJAL

There was nothing Lt. Godfrey Cabot loved more than flying his old biplane. He'd spend all day flying it if he could. The only thing that kept bringing him back to earth was the plane's limited fuel supply.

But, he had a plan for that.

Oh sure, some called it a fool's errand, others just plain crazy, but he knew it would work.

It had to.

The idea was simple. Dangle a rope with a grappling hook outside the plane and use it to pick up fuel cans that were placed on floating platforms on oceans and lakes. This way, pilots wouldn't need to land and could stay in the air for longer periods of time.

So, one day in 1918, the Navy Reserve pilot trailed a grappling hook-tipped rope behind his plane and descended toward the ground. Concentrating hard, he aimed his "refueling" contraption at the fuel cans below and flew right over them.

A small lurch told Lieutenant Cabot he'd snagged something. Leaning out of the cockpit, he glanced over the side of the biplane and saw a beautiful sight.

There, dangling from the end of the rope was a shiny, full gas can.

He'd done it!

And with that, the era of aerial refueling was ushered in, an era that would quickly evolve and become one of the most significant contributors to air power and air superiority for America's Air Force.

Lieutenant Cabot's idea, though performed successfully, was never adopted in practice. Yet, his efforts did open people's eyes to the value of aerial refueling and it wasn't long before his dream of being able to fly for longer periods of time became a reality.

For this, the young Navy pilot was immortalized as an aerial refueling pioneer.

Today, he is a symbol of the aerial refueling community, a community of pilots and boom operators who fly airborne "gas stations" and deliver millions of gallons of fuel to thousands of aircraft every year.

These flying gas stations, including the KC-135 Stratotanker, which has been in service since 1957, and the KC-10 Extender, the Air Force's newer tanker, perform air-to-air refueling of Air Force, sister-service and partner-nation aircraft on a daily basis.

These receiver aircraft range from small, agile fighters, such as the F-22 Raptor and the F-15 Eagle, to large, cumbersome airlifters, such as the C-17 Globemaster III and the C-5 Galaxy. Large command-and-control aircraft, like the E-3 AWACS and the E-8 Joint-STARS, also depend on tankers to stay aloft and provide continuous mission control and reconnaissance capabilities. Bombers, like the B-52 Stratofortress, use refueling to carry maximum bomb payloads over long distances.

A KC-135 Stratotanker's flying boom awaits a B-2 Spirit to be refueled during an air refueling mission. The B-2 Spirit is from Whiteman Air Force Base, Mo. and the KC-135 Stratotanker is assigned to the 126th Air Refueling Wing, Scott Air Force Base, Ill.

Sergeant Brown, a KC-135 Stratotanker boom operator assigned to the 126th Air Refueling Wing at Scott Air Force Base, Ill., prepares to refuel two B-2 Spirits from Whiteman AFB, Mo.

Day or night, good weather or bad, these aerial refueling aircraft keep military aircraft in the air, extending their endurance, range and payload and vastly increasing their effectiveness.

AN IMPORTANT MISSION

Think of the airplane that enables the U.S. military to respond anywhere in the world on short notice. It's not a long-range bomber like the B-52, or a cargo-hauling C-5 or even the lethal F-22 fighter.

It's the tanker.

Aerial refueling tankers are the quiet enablers of joint air power. By allowing fighters, bombers, cargo planes and other aircraft to refuel without landing, they greatly extend the operational range of U.S. forces.

"The air refueling mission is crucial to the American military's global reach and success," said Maj. Gen. Mark S. Solo, commander of the 618th Tanker Airlift Control Center at Scott Air Force Base, Ill. "The command off-loads an average of 5 million pounds of fuel. Without the capability of in-air refueling, many missions would not be possible."

To some in the air community, aerial refueling is one of the most important capabilities possessed by modern air forces.

"No single innovation of recent times has contributed more to airpower flexibility than the aerial tanker," said retired Maj. Gen. Perry Griffith, a former B-24 Liberator pilot who flew long-range missions during World War II.

Air Force leaders also recognize the importance of aerial refueling.

"Without tankers, the Air Force isn't global," said Gen. Norton Schwartz, Air Force chief of staff. "Tankers are the backbone of the nation's ability to project global reach and power."

"The air refueling capability is fundamental to the United States' power projection across the spectrum of conflict," said Secretary of the Air Force Michael B. Donley.

Even Air Force doctrine has been created pointing to the unique capabilities tankers bring to the fight.

According to Air Force Doctrine: "Air refueling, when properly employed, enhances, enables and multiplies the strategic, operational and tactical effects of any air operation."

A STORIED HISTORY

The military hasn't always looked favorably on the idea of air-to-air refueling. It took many years and several feats of bravery before the military finally latched on to the idea.

Lieutenant Cabot's unconventional idea led the charge, but the first recorded air-to-air refueling didn't take place until 1921, when Wesley May, a barnstorming stuntman, strapped a five-gallon gas can to his back and stepped from the wing of a Lincoln Standard to the wing of a Curtis JN-4 and emptied the can's contents into the JN-4's fuel tank.

The military didn't accomplish an air-to-air refueling until 1923, when the Army Air Service, predecessor to the Air Force, used a hose to refuel one aircraft from another. Later that year, two Air Service lieutenants, John Richter and Lowell Smith, used aerial refueling to fly their de Havilland DH-4B for 37 hours and more than 3,200 miles over southern California. They were refueled 15 times from another DH-4B, receiving 75 gallons of fuel through a hose.

The lieutenants went on to demonstrate practical applications of the new capability by flying non-stop from the Canadian border to Tijuana, Mexico, covering the 1,300 miles in 12 hours with two refuelings. However, an accident the following month abruptly ended their cycle of experimentation.

Then, five years later, the idea resurfaced.

On New Year's Day 1929, a Fokker C-2 trimotor set off on a

Maj. Jen Moore looks over mission paperwork for a refueling mission leaving Scott Air Force Base, Ill. Major Moore and her crew will be refueling two B-2 Spirits from Whiteman Air Force Base, Mo. Major Moore is a KC-135 Stratotanker pilot assigned to the 126th Air Refueling Wing.

record-setting flight. Using two Douglas C-1 biplanes as tankers, the C-2 stayed in the air for seven days before a failing engine on the aircraft brought it back to the ground. During the flight, the aircrews transferred 5,660 gallons of fuel and 245 gallons of oil.

Despite the achievement, development was still slow in coming in the U.S. Throughout World War II, long-range strategic missions and aerial refueling were greeted with skepticism by most of those in command.

Then, after the war, the long-range requirements of the Strategic Air Command renewed interest in aerial refueling. Development progressed rapidly, culminating in March of 1949, when a specially outfitted B-50A bomber completed the first non-stop, around-the-world flight. Fuel was dispensed from modified B-29 bombers, called the KB-29 tanker.

Air refueling was now a viable, and functional, part of the Air Force and air-to-air refueling was here to stay.

Maj. Jen Moore, 1st Lt. Brent Smith and Master Sgt. Daniel Brown discuss their flight plans during a pre-flight briefing. Major Moore and Lieutenant Smith are KC-135 Stratotanker pilots and Sergeant Brown is a boom operator assigned to the 126th Air Refueling Wing.

BY THE NUMBERS

Anyone who doubts the contributions or effectiveness of tankers and their crews need only look at the numbers surrounding them.

In operations Enduring Freedom and Iraqi Freedom, tankers prove their worth on a daily basis. According to the Combined Air Operations Center, from 2004 to 2007, tankers flew 53,518 sorties and offloaded more than three billion pounds of fuel to more than 121,000 aircraft.

In the last six months alone, KC-10s and KC-135s have flown 9,191 sorties and offloaded 94,332,776 gallons of fuel. That's enough fuel for a 1969-era rocket to fly to the moon and back approximately 130 times.

And these numbers are only for the Central Command area of responsibility. They don't take into account the thousands of other sorties taking place all across the globe in support of other missions and training requirements.

From Vietnam to Iraq and Afghanistan, tankers have participated in every conflict and mission this nation entered. And today every aircraft refueled could be one dropping bombs on an important target, delivering much-needed supplies to forward-deployed bases or providing close-air support to troops on the ground.

In other words, every sortie flown by a tanker, every gallon of gas delivered, is one contributing to the nation's goals of global reach and air superiority.

So, though unconventional and risky in practice, Lieutenant Cabot's aerial refueling plan was tremendous in theory. Extend the reach of airplanes and extend their capabilities.

Little did he know that after snagging that gas can, he not only made the idea of aerial refueling a viable option, but he also flew off into the history books for doing the thing he dreamed of most.

Flying … and not having to come back down.

Maj. Jen Moore and 1st Lt. Brent Smith conduct a pre-flight checklist before a refueling mission Major Moore and Lieutenant Smith are KC-135 Stratotanker pilots assigned to the 126th Air Refueling Wing.

IN-FLIGHT REFUELER

Master Sgt. Daniel Brown

photo by Staff Sgt. Desiree N. Palacios

"This is the best job in the world! No matter what type of mission the Air Force, our sister services or coalition partners are flying, I get to be a part of it. I've been a part of medical evacuations, hurricane evacuations and close air support missions in Operation Enduring Freedom. It's a great feeling to know that I'm helping American citizens in crisis as well as my military brothers and sisters on the ground in the theater."

HOME UNIT/BASE:
126th Air Refueling Wing
Scott Air Force Base, Ill.

DEPLOYMENTS:
Kosovo, Turkey, Guam

HOMETOWN:
Sacramento, Calif.

ENTERED AIR FORCE:
Sept. 27, 1990

PRIMARY AFSC:
1A071 - In-flight Refueler

Gen. Arthur Lichte stands in front of a KC-135 Stratotanker on the flightline at Scott Air Force Base, Ill. General Lichte is the Commander of Air Mobility Command.

GLOBAL RANGERS

AIR MOBILITY COMMAND'S AIRLIFT, TANKER FLEET PROVIDE NECESSARY WORLDWIDE REACH

STORY BY TECH. SGT. MATTHEW MCGOVERN ✪ PHOTOS BY STAFF SGT. DESIREE PALACIOS
DESIGN BY G. PATRICK HARRIS

Bringing heavyweights to the joint fight is the main concern of the commander of Air Mobility Command.

The heavyweights, in the form of mobility airlift and tankers are what Gen. Arthur J. Lichte and his 132,000 active duty, Air National Guard, and Air Force Reserve Airmen and civilian counterparts, keep in the fight on a daily basis.

According to officials in the Combined Air Operations Center in Iraq, mobility airlift and tanker operations account for about 70 percent of sorties flown in the U.S. Central Command area of responsibility. Since 9-11, AMC aircraft have transported more than 12 million passengers—equivalent to moving the population of metropolitan Los Angeles. In addition, command aircrews delivered more than 4.5 million tons of cargo—nearly 92,000 fully-loaded semi trucks.

"Amazingly, on average, one mobility aircraft departs every 90 seconds, every day, 365 days a year," said General Lichte, AMC Commander. "But air mobility doesn't just happen; it is the product of incredible Airmen performing an extraordinary mission, delivering the closed fist of justice or the open hand of freedom and hope, anywhere at any time. We're all in the joint fight."

The heavyweights in the fight are the C-17 Globemaster IIIs and C-5 Galaxys that bring supplies and weapon systems coalition forces need like M1 Abrams tanks and Mine Resistant Ambush Protected vehicles.

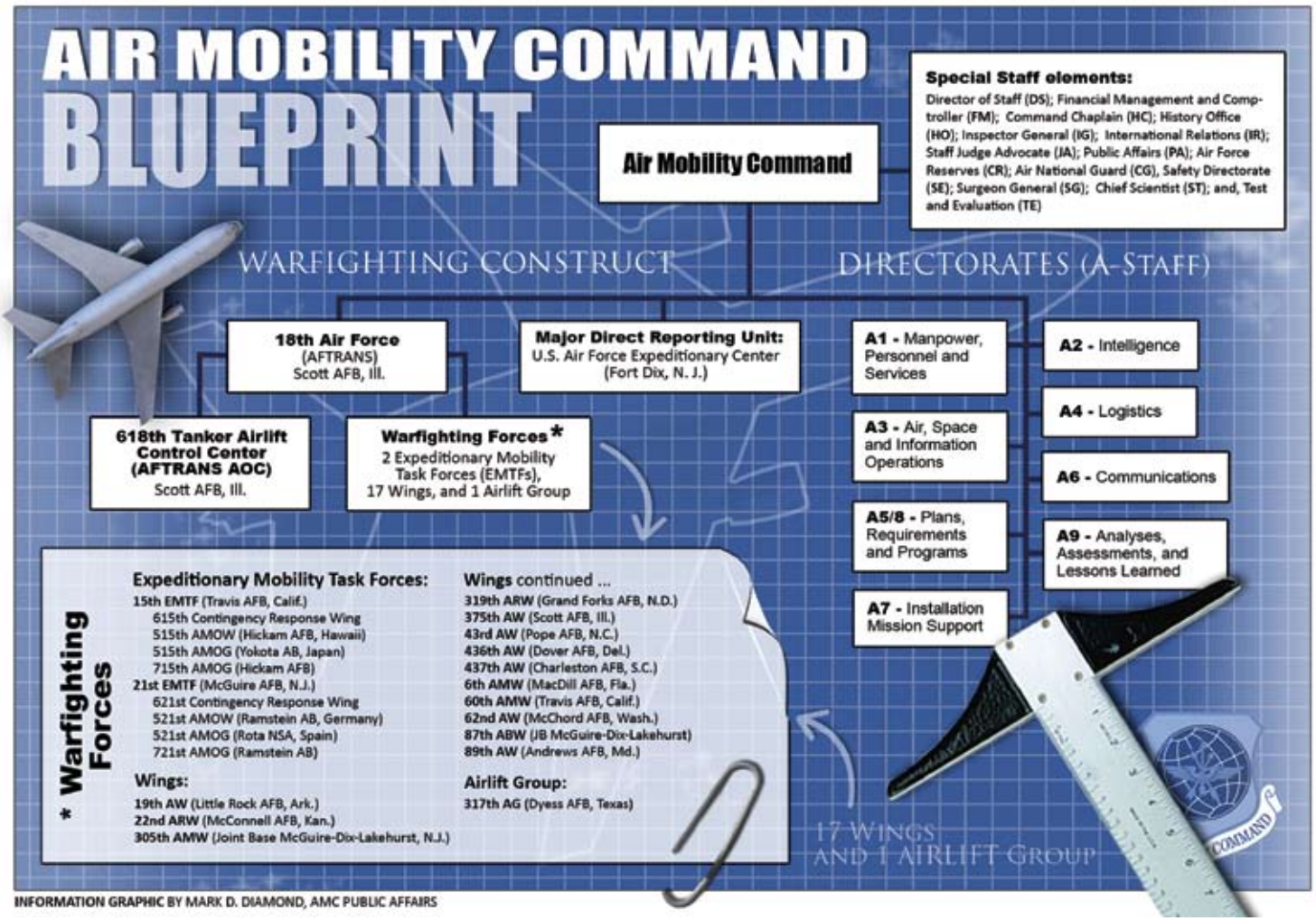
And when airfields aren't readily available, AMC crews can deliver cargo to ground forces via airdrop.

New upgrades, like the Joint Precision Airdrop System, use global positioning that provides increased control upon release from the aircraft.

"JPADS allows us to drop supplies from high altitudes with pinpoint accuracy, keeping our air crews and ground troops less exposed to hostile fire … and that's saving lives," General Lichte said.

AMC Airmen save lives in non-war environments as well play a crucial role in providing humanitarian support at home and around the world. Operating out of more than 170 countries, AMC Airmen provide lifesaving care, humanitarian airlift, precision airdrop, port opening, and worldwide air refueling.

"On the aerial refueling side of the mobility mission, tankers are a critical force enabler and force multiplier of air power, making it



INFORMATION GRAPHIC BY MARK D. DIAMOND, AMC PUBLIC AFFAIRS

possible for other Air Force, Navy, Marine Corps and allied aircraft to fly farther, stay airborne longer and carry more weapons, equipment and supplies," General Lichte said.

The total force tanker fleet, consisting of Air Guard, Reserve and active duty crews, fly about 130 sorties on an average day, offloading fuel roughly equivalent to 16 Olympic-sized pools to more than 330 receivers. Some of these tankers keep combat air patrol fighters in the air over the U.S. performing their homeland defense mission. Other tankers fuel fighters moving from stateside to their deployment locations or to refuel airlift aircraft such as C-5s and C-17s as they deliver cargo. Tankers also perform aeromedical evacuation missions daily when required.

Though the tankers get the job done, the KC-135 is a 50-year-old plane and changes to the aging fleet are underway.

"Imagine traveling from New York to California in a 1957 Chevy," General Lichte said. "It might get you there, but what if it breaks down on the side of the road and needs a fan belt or a water pump? You probably won't be able to get parts, and the nearest gas station won't be able to repair it. That's our KC-135, the core of our tanker fleet. We don't like to consider the options if our tanker is broken on the side of the road."

Though the KC-135 continues to handle the majority of the refueling mission, General Lichte said AMC officials anticipate the acquisition process will begin this year for the new KC-X.

The general also said the new tankers will allow AMC operators to take advantage of the technological advances in aviation development from the last 50 years and he stressed the importance of tankers.

"Without tankers, we'd have to quadruple the number of fighters and other aircraft to sustain operations," General Lichte said. "Without tankers, a bomber would have at least two enroute stops with crew rest and would not arrive over target until day three at the earliest. Tankers allow us to launch a bomber from the Midwest, and with multiple aerial refuelings, arrive on target half-way around the world that same day," he said.

"No other country in the world can consistently do that... nobody," the general said. "Humanitarian and aeromedical evacuation missions also are impacted. Without tankers, we lose options because we can't get people, equipment and supplies to their destination in a hurry. Some countries won't let us overfly or land. If you don't have tankers, you can't get wounded troops back rapidly to the U.S."

The C-5 Galaxy is undergoing modernization with more powerful engines as well as reliability enhancements. After the extensive upgrades the aircraft is then known as the C-5M Super Galaxy. The new engines are capable of delivering a 22 percent increase in thrust and a 58 percent faster climb rate, and they allow significantly more cargo to be hauled over longer distances.

"I recently had the opportunity to deliver the first of 52 C-5M aircraft," General Lichte said. "The C-5M has a modernized avionics system as well as new engines and engine subsystems that will greatly improve its capability and reliability. "Furthermore, we are working on modernizing the avionics of the entire C-5 fleet," General Lichte said.

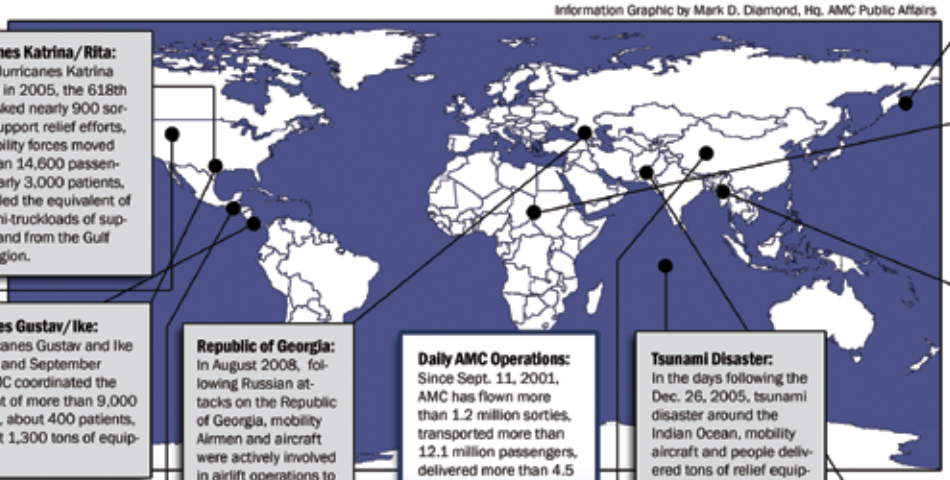
AMC's people and "heavyweights" will continue to evolve and train to meet challenges, General Lichte said.

"No one in the world can do what we do," he said. "To continue to be the best, AMC will improve, innovate, overcome, and adapt to changes in the world to ensure our ability to provide worldwide, world-class airlift, air refueling, aeromedical evacuation, and the necessary global reach laydown to support our joint and coalition partners.

Rapid/Precise Global Air Mobility

On a typical day, Air Mobility Command coordinates an average of 900 airlift and air refueling missions, moving nearly 2,000 tons of cargo and more than 6,000 passengers. From delivering fuel, supplies and aeromedical support to combat forces, to providing humanitarian aid -- or soft power -- to victims of natural disasters both at home and abroad, Air Mobility Command has been engaged in almost nonstop operations since its inception. This map includes just a few highlights of AMC operations since Sept. 11, 2001.

Information Graphic by Mark D. Diamond, Hq. AMC Public Affairs



U.S. Wildfires:
AMC frequently supports firefighting efforts throughout the United States, transporting people and equipment to the affected areas. In 2008 alone, C-130s conducted more than 985 drops, dispensing more than 1,350,000 gallons of fire retardant and water.

Hurricanes Katrina/Rita:
During Hurricanes Katrina and Rita in 2005, the 618th TACC tasked nearly 900 sorties to support relief efforts, and mobility forces moved more than 14,600 passengers, nearly 3,000 patients, and hauled the equivalent of 686 semi-truckloads of supplies to and from the Gulf Coast region.

Hurricanes Gustav/Ike:
For Hurricanes Gustav and Ike in August and September 2008, AMC coordinated the movement of more than 9,000 evacuees, about 400 patients, and about 1,300 tons of equipment.

H1N1 Kits:
In May 2009, an AMC C-17 Globemaster III and its crew, in a joint effort with with U.S. Southern Command, delivered 30,000 H1N1 influenza prevention kits to six Central American countries.

Guatemala:
In December 2008, an AMC C-5 Galaxy packed with 64,000 pounds of cargo traveled to the Guatemala City International Airport to assist a local grade school and orphanage. The crew delivered a variety of supplies, including kitchen items, clothes, dressers, desks, and beds.

Republic of Georgia:
In August 2008, following Russian attacks on the Republic of Georgia, mobility Airmen and aircraft were actively involved in airlift operations to aid the people of Georgia. In addition to almost 600 tons of relief supplies, Air Force C-17s quickly transported nearly 2,000 Georgian troops and their equipment from their deployed location in Iraq to the Georgian capital of Tbilisi.

Daily AMC Operations:
Since Sept. 11, 2001, AMC has flown more than 1.2 million sorties, transported more than 12.1 million passengers, delivered more than 4.5 million tons of equipment and supplies, and offloaded about 1.5 billion gallons of fuel.

Tsunami Disaster:
In the days following the Dec. 26, 2005, tsunami disaster around the Indian Ocean, mobility aircraft and people delivered tons of relief equipment and hundreds of servicemembers into the affected region.

China Earthquake Relief:
In May 2008, the Defense Department responded to a Chinese request for assistance, and C-17 aircraft delivered approximately 200,000 pounds of FEMA-supplied humanitarian aid to China's earthquake-striken Sichuan province. Within 24 hours after the government coordination was completed, the cargo was being off-loaded in China.

Pakistan Earthquake:
In 2005, mobility Airmen assigned to the 621st Contingency Response Group supported 273 U.S. missions providing 15,294,000 pounds of relief supplies, including more than 93,000 sleeping bags and 292,000 blankets.

Burmese (Myanmar) Relief:
In May 2008, Air Force C-130s delivered emergency relief to Rangoon International Airport in response to devastation caused by Tropical Cyclone Nargis. All told, Air Mobility aircraft flew 63 missions into Myanmar, delivering more than 1.1 million pounds of relief supplies.

Darfur (Africa):
In January 2009, Air Mobility Command was poised to assist a U.S. Africa Command-led operation to airlift equipment into the Darfur region of Sudan in support of United Nations and African Union peacekeeping missions.

Russian Sub Rescue:
In August 2005, AMC generated airlift and air refueling missions supporting the rescue effort to save seven Russian sailors stranded aboard a submarine off Russia's coast.

Charleston Air Force Base and Dover AFB members load Mine Resistant Ambush Protected vehicles onto a C-5 Galaxy assigned to the 436th Air Wing, Dover, AFB, Del. at Charleston AFB, S.C. The C-5 is undergoing modernization with more powerful engines as well as reliability enhancements. The new engines are capable of delivering a 22 percent increase in thrust, 58 percent faster climb rate and allows significantly more cargo to be hauled over longer distances.

A student enrolled in the Air Force Phoenix Warrior Training Course is fully covered in digital camouflage during training at Joint Base McGuire-Dix-Lakehurst, N.J. Phoenix Warrior is taught by the U.S. Air Force Expeditionary Center's Expeditionary Operations School and 421st Combat Training Squadron.

TEACHING 'AIRPOWER ... FROM THE GROUND UP'

U.S. AIR FORCE EXPEDITIONARY CENTER TAKES AIRMEN TO A NEW LEVEL IN JOB, DEPLOYMENT PREPARATION

STORY AND PHOTOS BY TECH. SGT. SCOTT STURKOL ✪ DESIGN BY LUKE BORLAND

Senior Airman Bassel Noori rides in the turret of a Humvee on a Joint Base McGuire-Dix-Lakehurst, N.J., range. A voice crackles from his radio as the driver shares information with five other tactical vehicles as they snake their way through South Jersey's Pine Barrens.

Suddenly, the heavy hum of the trucks' diesel engines is overpowered by a deafening BOOOOOOOOOM! then the "RAP, RAP, RAP!" of an adversary's AK-47. The M-16 in Airman Noori's hands rattles into action, and he responds with his own fire: "BAP, BAP, BAP!"

Under attack from "opposing forces," Airman Noori discovers the lead Humvee in his convoy is down. Leaping from his vehicle, he removes the injured from the disabled truck. A nearby comrade pops open a smoke canister, creating a billowing, purple smoke screen.

Quickly assessing the wounded for injuries, Airman Noori administers first aid, bandages wounds and helps carry the injured to another Humvee. Within seconds, the convoy presses forward to a safety zone.

"Scenario over. Let's gather up," yells instructor Staff Sgt. Paul Evans, his voice ending the drama like a filmmaker's clapboard as he jumps from the back of the last truck.

"Time for feedback," he orders.

In the deployed theater, casualties can't be simulated. Supporting numerous combat operations in Iraq and Afghanistan, 45 Airmen have been killed in combat and more than 500 wounded since 2001, according to recent Department of Defense statistics. More than 71 percent of the 330,000 active-duty Airmen, along with their Air National Guard and Air Force Reserve teammates, have deployed since then.

Ensuring the bad guys lose and the good guys stay alive is no easy task for Sergeant Evans and the more than 300 instructor cadre who are assigned to the 360-member staff of the U.S. Air Force Expeditionary Center located on the Joint Base McGuire-Dix-Lakehurst.

CENTER OF EXCELLENCE

The center's staff is responsible for sharpening the warfighting skills of Airmen with just-in-time training before they deploy. The Expeditionary Center stretches across 34 acres, encompassing a state-of-the-art headquarters and utilitarian barracks to house the more than 7,000 students annually for combat skills training. Additionally, through its campus at Joint Base McGuire-Dix-Lakehurst and detachments at Hurlburt Field, Fla., and Scott AFB, Ill., an additional 16,000 students complete courses online and in-residence. The center staff also uses the sprawling woodlands of the South Jersey area, more than 22,000 acres of ranges, for weapons and survival training.

photo by Staff Sgt. Paul R. Evans

A student in the Air Force Phoenix Warrior Training Course responds to enemy fire during training in convoy operations. The course, taught by the U.S. Air Force Expeditionary Center's Expeditionary Operations School and 421st Combat Training Squadron, prepares security forces Airmen for upcoming deployments.

photo by Staff Sgt. Paul R. Evans

Airman 1st Class John Vega, 30th Security Forces Squadron, takes a break after he and other students in the Air Force Phoenix Warrior Training Course completed a run on an obstacle course at Joint Base McGuire-Dix-Lakehurst, N.J.

When it was created as an "air mobility" center of excellence about 15 years ago in 1994, by then-Air Mobility Command Commander Gen. Ronald R. Fogleman, the center was called the Air Mobility Warfare Center. His original vision was to consolidate all global reach training, curriculum and tactics development and sustainment training under a single AMC organization.

Since then, the Expeditionary Center's mission has expanded. Renamed March 4, 2007, its staff not only helps create mobility experts, they also prepare Airmen for deployment. The center cadre does this through its Mobility Operations School, Expeditionary Operations School and the Expeditionary Center Resources Directorate.

An official charter signed by Air Force Chief of Staff Gen. Norton Schwartz has given the center a boost, focusing its mission on advanced training and distinguishing it from other training centers, such as those operated by Air Education and Training Command officials.

"A large part of our credibility came when the chief of staff signed our charter, tasking us to be that advanced center for expeditionary skills, to provide those tactics, techniques and procedures that our young Airmen need to be successful in any contingency, and make sure we disseminate that capability to the field," said Maj. Gen. Kip Self, the center's commander.

"Fifteen years ago, that early mission helped develop what we see today in the Expeditionary Center. It's been a great 15 years of development," General Self said. "The center has constantly adapted to the needs of the Air Force to be on the leading edge. That continues today in all facets of our training, bringing the most current tactics, techniques and procedures into our classrooms. That's why we're so proud of branding a phrase I've coined: 'Airpower . . . From the Ground Up!'"

As military officials increase the number of troops destined for Afghanistan and tap more Reservists and Guardsmen to fill shortfalls in positions originally intended to be filled by civilians, the critical warfighting and survival skills taught by Expeditionary Center

Staff Sgt. Jamie Widrig (right), instructor and course director for the Mobile Command and Control Generator Course for the U.S. Air Force Expeditionary Center's Mobility Operations School, shows students in her course the basics of a generator.

instructors are needed now more than ever, said General Self, who manages the center on an annual budget of more than $22.6 million.

"We're basically the '911' of providing contingency response in terms of expeditionary skills training," he said. "When the Air Force chief of staff talks about us being 'all in,' it's here at the center where we are developing that Airman to be prepared to operate 'all in' at any time."

"Besides supporting an excellent mission of expeditionary and mobility training, our facilities are top notch," said Capt. Todd Caskey, deputy director of the resources directorate. "In my experience, the Expeditionary Center rivals any of the best training institutions anywhere."

Across the street from the Expeditionary Center's main building are two three-story dormitories. Both are used by 421st Combat Training Squadron personnel. Part of each building is used as offices for the 421's "black hats," the more than 120 instructors from nearly 40 different career fields. Each instructor has to earn the black tab emblazoned on the front of his hat.

"In my squadron, we are all focused on being contingency skills instructors," said Lt. Col. Mitchell Monroe, commander, 421st CTS. "We recently had a tab ceremony after seven of my cadre attained their instructor status. Most all of our instructors come to us hand-picked. When they apply, we take a look at their record and their physical fitness level and we determine if they will be a good fit for us."

Once selected, instructors, no matter the career field, begin their training, which can take up to six months before they are certified. They attend an in-house session of instructor training called the Academic Instructor Course. From there, if the 421st instructors have not recently deployed, then they go through their primary course of instruction as a student.

"For example, if you are going to be teaching in ACST, then you'll first go through that course as a student. If you're security forces, you'll go through our Phoenix Warrior course," Colonel Monroe said.

All instructors attend the Academic Instructor Course taught by the Resource Directorate's Instructional System Design Division.

"This training starts them off by ensuring they understand they are a professional instructor," said Mr. Philip Mohasci, division director. "They are a certified member of the Air University community and they are accredited instructors. They are accredited and the result is their students earn Community College of the Air Force credits for attending their courses."

All 421st CST instructors have to learn dismounted tactics as their first course of instruction and then be evaluated on it.

"To us, dismounted tactics is the absolute basic core of what we do," Colonel Monroe said. "If the worst happens, and you now find yourself engaged with the enemy, you've got to disengage and be

able to find yourself a place where you can secure yourself and wait until the quick-reaction force comes. That's what dismounted tactics are all about — shoot, move, communicate and self-medicate."

TRAINING IS GROWING, WORKING

The Expeditionary Operations School's 421st CTS staff manages the center's advanced contingency skills courses and provides training that Airman Noori experienced. Colonel Monroe said the training they give is "above and beyond" what's taught at the wing level.

"Airmen who are in joint engagement training will go through combat skills run by the Army," Colonel Monroe said. "There are two other venues in the continental U.S. alone that hold combat skills training — Camp Guernsey, Wyo., and Camp Bullis, Texas. All three venues — Guernsey, Bullis and the Expeditionary Center — will all eventually be teaching the exact same skill sets in the Combat Airman Skills Training that are established by AETC."

CAST is a standardized set of 96 hours of contingency skills training for deploying Airmen, said Colonel Monroe. Within that set of hours, deploying Airmen receive training in dismounted patrol tactics, mounted patrol or convoy tactics, military operations in urban terrain, "combatives," or ground fighting, and more.

"What's different about our Advanced Contingency Skills Training, for example, is we have lead-in tracks for all deploying chaplains, chaplain assistants, and judge advocates and paralegals," Colonel Monroe said.

That lead-in training has paid off. One former graduate said what he learned helped prepare him for the unexpected.

"I went through the Advanced Contingency Skills Training Course and the Judge Advocate portion in February and March of 2008," said Capt. Andrew Barker a legal officer from F.E. Warren AFB, Wyo. "After training, I deployed to the International Zone in Iraq. While in Baghdad, I found myself in a position where I had to help two Soldiers clear several rooms in an occupied building in the Red Zone. It wasn't as dramatic as it could have been, and it turned out that there was very little danger, but I didn't know that until we had finished the job. I'm very glad that I had the training and weapons familiarization from ACST."

Colonel Monroe said the bottom line is, as a service, Airmen are being sent into harm's way more now than ever before. Through courses like ACST, Airmen are getting the training they need to make it home safely.

"Whether it is in one of the deployed zones like Iraq or Afghanistan, or preparing them to respond anywhere the national command authority decides to send them, we owe Airmen the training so they're fully prepared to be able to survive, operate and return home," he said.

Security forces Airmen training for an upcoming deployment participate in a field course for military operations in urban terrain. The training is taught by the U.S. Air Force Expeditionary Center's 421st Combat Training Squadron cadre.

CREATING MOBILITY, CONTINGENCY EXPERTS

In a darkened classroom in the Mobility Operations School's mobile command, control and communications, or mobile C3, facility, Staff Sgt. Jamie Widrig uses a computer-generated illustrator called a "smart board" to highlight schematics for a large generator for her students in the school's Mobile Command and Control Generator Course.

"If this line is not connected, the generator just won't work," she said. "If you can't get this generator to work now, how will you get it to work when it's 100 degrees outside at some forward operating base? We have to know this."

Meanwhile, in the main building of the Expeditionary Center, students in MOS' Advanced Study of Air Mobility, or ASAM, program are combing through the fine details of the air mobility business. ASAM, an in-residence intermediate developmental education program specifically tailored to further the professional development of mobility officers, follows a 13-month curriculum. ASAM graduates receive a master of logistics degree from the Air Force Institute of Technology.

"ASAM is the inspiration of General Fogleman," said MOS Director Rudy Becker. "While commander of U.S. Transportation Command and AMC, he recognized the need for an educational program to bridge the tanker and airlift missions, and mold future Air Force leaders with a thorough knowledge of air mobility. He envisioned an educational experience that would provide graduates the tools and training to address world-wide mobility and deployment issues now, and cultivate a core of mobility experts to lead AMC in the future."

It's this kind of training that Mr. Becker calls "velocity in training."

"The ultimate vision of our school's training is simple," Mr. Becker said. "We mirror the mission environment that our Airmen will be working in as closely as possible, so when they show up at the

photo by Staff Sgt. Paul R. Evans

Students enrolled in the Air Force Phoenix Warrior Training Course participate in combat first aid training class at U.S. Air Force Expeditionary Center. The training sharpens the warfighting skills of Airmen with just-in-time training before they deploy.

worksite, either in-garrison or deployed, their first impression is, 'I've been here before, and I'm ready.'"

The MOS, through 73 in-residence and online courses, prepares Airmen in operations, logistics, transportation, maintenance, aircrew resource management and command and control from both a global and theater perspective.

To ensure Airmen are ready, MOS cadre use technology and simulation along with skilled instructors from across the mobility spectrum.

Sergeants Widrig's class and ASAM are just two examples of MOS' "velocity." In Master Sgt. Chris Sherman's course, the MOS Mobility Air Forces Mobile Command and Control Leadership Course, the effort is about making Airmen better by creating contingency response leaders.

Students in the Advanced Contingency Skills Training Course participate in a scenario during convoy operations training at Joint Base McGuire-Dix-Lakehurst, N.J. The course, taught by the U.S. Air Force Expeditionary Center's 421st Combat Training Squadron cadre, also on the base, prepares Airmen for upcoming deployments with advanced combat skills.

The course teaches Airmen, both officer and enlisted, to become better leaders as contingency response element commanders, or contingency response team chiefs. Students have to learn every possible aspect of what they could face as leaders, and Sergeant Sherman said he often receives feedback about his students leading the way across the globe.

"It's rewarding to see my students out there influencing world events," said Sergeant Sherman. "Whether it's a mission to Tiblisi, Georgia; delivering relief supplies to Darfur; or supporting our citizens during Hurricane Ike, my students are there leading those air mobility support operations. They are leaders in action."

Senior Master Sgt. Greg Lucas, airfield services manager for the Kentucky Air National Guard's 123rd Contingency Response Group at Louisville — the first-ever ANG contingency response group created — said his training in Sergeant Sherman's course not only helped him but also his fellow Airmen.

"When you are in a contingency environment, you can face many challenges," Sergeant Lucas said. "The knowledge I gained from the course helps me to be ready for those challenges and furthered my leadership skills. It also helps me help my Airmen be leaders, especially if we are deployed somewhere."

Back outside at the mobile C3 facility, Tech. Sgt. Don Colbert, course director for the MOS Mobile C3 Systems Course works on the new hard-sided expandable lightweight air mobile shelter, or HELAMS. The mobile air shelter is the latest of its kind the Air Force has to offer, and Sergeant Colbert said it is among many things the Expeditionary Center and MOS have on hand for training.

"HELAMS will eventually replace the mobile air reporting communications shelter that's in use today," said Sergeant Colbert. "By replacing the MARC, which was put into service in the mid-1980s, the HELAMS provides for more work space and a new high-frequency radio system that requires less power to operate.

HELAMS provides mobility forces the best equipment available to complete their duties in a bare-base environment," Sergeant Colbert said. "Our students have that available to them here to be ready for the future."

Airmen in the air transportation career field, also known as "aerial porters," also get advanced training at the MOS. Air transportation Airmen have 13 of the center's 16 online courses available to them and have in-residence courses such as the Aerial Port Operations Course, or APOC, which is held approximately 12 times a year. APOC instructors give students a "walk-around" of the entire aerial port to include air freight, passenger service, air terminal operations center and functions done at higher headquarters, such as AMC.

"This course gives them a chance to learn about the processes that are going on in the other sections, providing a much a bigger picture," said Tech. Sgt. James Carson III, course director. "When on deployments, this kind of training pays off for aerial porters. A deployed aerial porter doesn't always have the time to ask why things are done in this sequence or why we use certain methods."

General Self said the MOS prepares mobility Airmen to attain their core vision of global reach laydown.

"Air Mobility Command stretches globally," said General Self. "It has the ability to get the beans and bullets to the warfighter in any location in the world through their en route system. And where there are no en route systems, those contingency response wings owned by AMC, are taught here in their formal training unit, and are able to open a base so that we have access.

"Clearly, having access is a key piece to being expeditionary," said General Self. "You never know where the next contingency will be and you have to be ready to go. Air Mobility Command's en route system and ability to open up bases anywhere in the world are key to that global reach. The Expeditionary Center's piece to that is to train those Airmen who execute that mission."

DEVELOPING DEPLOYMENT-READY AIRMEN

The EOS faculty educates and trains expeditionary combat support Airmen in deployed operations through courses such as Advanced Contingency Skill Training for all combat support specialties, Phoenix Warrior and Phoenix Raven for security forces and the Force Protection Intelligence Formal Training Unit for the intelligence field.

Phoenix Raven Training is one of the oldest courses taught at the

EOS. Started in 1997, it is an intense 18-day training program that covers cross-cultural awareness, embassy operations, airfield survey techniques, explosive ordnance awareness, aircraft searches and unarmed self-defense techniques. Since its inception, fewer than 2,000 Airmen, including members of other services, have earned the Raven patch.

"I really enjoyed it," said Navy Master at Arms Seaman Kyle Reed from Naval Air Station North Island, near San Diego, who attended the course in February. "Raven training gave me some useful skills to use if I need them in protecting an aircraft. The training was some of the best I've ever received."

Besides Phoenix Raven, security forces Airmen also receive advanced contingency skills training through the Phoenix Warrior Course, which started in August 2006. It has evolved to meet the shifting tactics of the deployed environment.

The EOS staff provides some of the newest equipment for its students. Recent upgrades in the training vehicle fleet include the addition of mine resistant ambush protective vehicles, up-armored Humvees and the light medium tactical vehicle. School officials also manage an armory, which has the largest store of foreign weapons in the Air Force. It stockpiles 153 different types of foreign and nonstandard weapons, such as the AK-47, AK-74 and MAK-90 automatic rifles.

"We have the foreign weapons, so our students can be familiarized with the weapons used by our adversaries," said Tech. Sgt. Charles Glunt, armory NCO in charge. "When you hear the 'rap, rap, rap' from an AK-47, you never forget it."

HAVING RESOURCES TO MEET EMERGING MISSIONS

The Resources Directorate staff manages the center's campus through a multitude of mission-support functions, including budget management, resource allocation and facility management. It also is the home of the Faculty and Curriculum Development Division, which develops and certifies courses and trains new instructors in the Academic Instructor Course.

"This training starts by ensuring our cadre understand they are professional instructors," said Mr. Philip Mohasci, division director. "They are certified members of the Air University community and they are accredited instructors. As a result of accreditation, students earn Community College of the Air Force credits for attending these courses."

BRINGING AIRMEN HOME

Airman Noori said the combat scenario played out in the Pine Barrens of the joint base helped him survive the gritty sands of Iraq.

"The convoy and military operations in urban terrain training were the two aspects of training from the Expeditionary Center that helped me in Iraq," said Airman Noori, who served as a security forces augmentee while deployed from MacDill AFB, Fla. "The training (I) and the other students received (was) based off real-world experiences, and I honor (the Expeditionary Center cadre's) service and wisdom for helping bring me home."

Editor's note: Chief Master Sgt. Paula Paige, Staff Sgt. Nathan Bevier and Staff Sgt. Paul Evans contributed to this story.

U.S. AIR FORCE EXPEDITIONARY CENTER AT A GLANCE

Commander: Maj. Gen. Kip L. Self

Operating locations: Joint Base McGuire-Dix-Lakehurst, N.J. (Headquarters); Hurlburt Field, Fla. (Det. 1); Scott Air Force Base, Ill. (Det. 2)

Assigned schools, departments: Mobility Operations School, Expeditionary Operations School, Resources Directorate, 421st Combat Training Squadron

Annual budget: $22.6 million

Personnel assigned: Overall, 360 (Active duty and Reserve, 262; government civilians, 60; contractors, 38)

Annual graduates: More than 23,000, including online grads (Note: CCAF credits are awarded for nearly all courses, both in residence and online.)

Slogan: "Airpower . . . From the Ground Up!"

Origin: First established in May 1994, as Air Mobility Warfare Center; renamed U.S. Air Force Expeditionary Center in March 2007

An Airman in the Advanced Contingency Skills Training Course practices a patrolling and tactics response during training. The training prepares Airmen for upcoming deployments.

12 HOURS

DISASTER STRIKES, AIRFIELD OPERATIONS NEEDED WHERE NONE EXIST, WHO CAN FLY IN 12-HOURS?

STORY BY RYAN MATTOX ✪ PHOTOS BY LANCE CHEUNG ✪ DESIGN BY MIKE CARABAJAL

Crumbling buildings, broken sewer lines, downed power lines and people trapped by debris and needing medical assistance can happen anytime, anywhere. No matter what type of disaster, whether caused by acts of nature or humans, the situation can seem overwhelming and wreak havoc on an affected area's infrastructure.

The key to overcoming the effects of a crisis is communication — people talking to people about what they need and how they are going to get that need met as soon as possible. For Airmen at one Travis unit, responding to that need or crisis is their mission and they can do it in 12 hours.

In Air Mobility Command circles, Travis Air Force Base, Calif. is known as the "Gateway to the Pacific." On a daily basis, Airmen coordinate various humanitarian and combat missions, moving cargo and passengers from one location to another in support of U.S. military missions and contingencys around the world.

In AMC, there are two units setup to go anywhere in the world and provide communication support for anyone at a moment's notice. One of those units is the 615th Contingency Response Wing at Travis AFB.

The 615th CRW is a specialized wing that provides a multifunctional and rapidly deployable capability to extend existing AMC infrastructure and respond to crises throughout the world. The wing's expertise includes setting up air bases, working command and control, running aerial ports, performing aircraft maintenance, and providing security and communications.

The 615th CRW employs cross-functional teams to quickly open forward air bases in an expeditionary environment to meet the needs of combatant commanders. The 615th CRW reports to the 15th Expeditionary Mobility Task Force, also located at Travis.

The unit provides support using a communications package of satellites, computers, phones, radios — an array of devices to

Always ready, Senior Airman Jonathan Lehman and Staff Sgt. Daniel Weinfurter verify battery inventory in a flyaway kit continuity book at Travis Air Force Base, Calif. Airman Lehman and Sergeant Weinfurter are with the 570th Global Mobility Squadron assigned to the 615th Contingency Response Wing. The 615th and it's sister unit at McGuire Air Force Base, N.J., open forward bases and extend existing Air Mobility Command infrastructure via rapid forward deployment capabilities. CRWs employ mission-ready airfield assessment teams, airfield operations, command and control, aerial port, and aircraft maintenance personnel, as well as airlift, weather, medical, intelligence, air traffic control, security forces, finance, fuels, supply and contracting personnel to project and sustain forces worldwide.

During a proficiency exercise, 570th Contingency Response Group Airmen set up an operational site at Travis Air Force Base, Calif. At Travis, three response groups maintain a 4-month alert cycle. Airmen of the CRW are ready to deploy anywhere within 12 hours of receiving a tasking.

communicate with anyone in the world. The unit can be ready to leave Travis AFB within 12 hours of notification and be fully operational within 12 hours upon arrival at the deployed location. The unit's Airmen provide communication any mission may require from secured and unsecured e-mail and Internet to air-to-ground communications.

Currently, the 615th CRW's sister unit, the 621st CRW out of McGuire Air Force Base, has equipment in southern Africa, but it is operated by Airmen from Travis. The equipment is called Deployable Air Mobility Division Communications Element or DACE.

"If they have a radio, we can talk to them," said Staff Sgt. John Hudson, 15th Air Mobility Squadron communications technician.

The unit has the whole radio communications spectrum covered.

"We provide so much for such a small footprint, and we provide a lot of service for our size," he said.

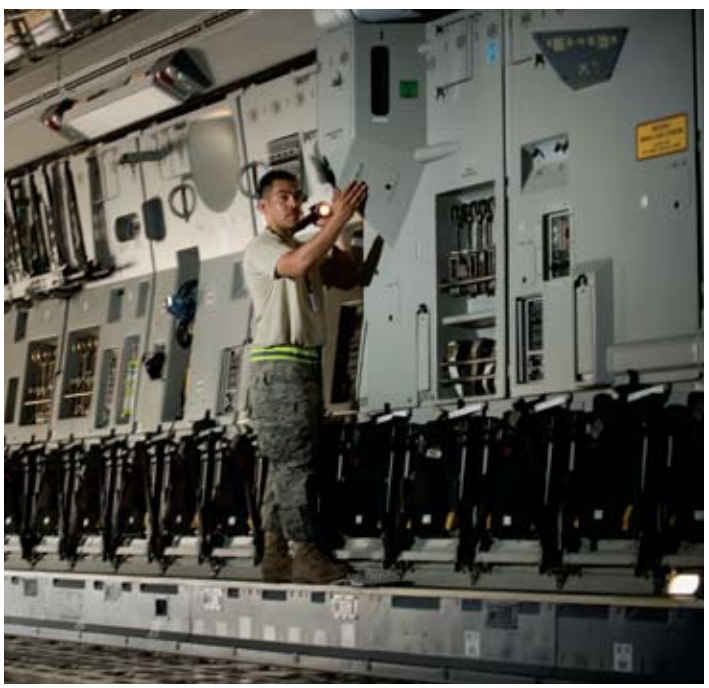
The unit is designed to support any type of situation needed. The Airmen have supported major operations such as operations Enduring Freedom and Iraqi Freedom, presidential movements, tsunami support, hurricane response, flood relief and wildfire support. Last year, the unit provided support for President Bush. They were also involved with evacuation and relief efforts for Hurricanes Gustav and Ike.

"Last fall, when we were tasked to support Hurricane Gustav and Hurricane Ike, our team and equipment were ready to go in four hours," said Lt. Col. Laura Lenderman, 15th Air Mobility Operations Squadron commander. "It's really a unique AMC and Air Force capability; we can provide this facility and communication package anytime, anywhere."

A DACE comprises of five people, each providing a unique Air Force specialty code or skill set – radios, voice, data, circuit control and satellite. Maintaining a scalable and interchangeable posture allows the unit the capability of working in any type of environment.

With five Airmen assigned, the unit spends a lot of time cross-utilizing those skills. Training allows the unit to maximize the talents of those assigned to reduce the initial Air Force footprint created, doing more with less.

"All of us train on the basics of each other's jobs, meaning we will do basic function checks on equipment or systems, but if I can't fix



Senior Airman Joshua Esparza performs a pre-flight inspection of a C-17 Globemaster III. Airman Esparza is a crewchief assigned to the 672nd Global Mobility Squadron, Travis Air Force Base, Calif. Airman Esparza is also qualified on the C-5 Galaxy.

it, I get the subject matter expert maintainer whose job it is to fix it," said Senior Master Sgt. William Mason, flight chief, 15th AMOS integration flight.

In the field, the unit usually operates out of a hard-walled deployable shelter system, providing 2,592 square feet of floor space, environmental control units and generators, along with a crew of seven civil engineers. However, living conditions are dependent on the mission and location.

"It all depends on where we are, who we are working for and what we are doing. We could be living like kings or we could be living like the lowest peasants," said Sergeant Hudson.

After arriving at the deployed location, everyone jumps in and sets up shelters and equipment. Shortly thereafter, the Airmen spend most of their time operating like a communications squadron at home station.

"At the front end of the deployment, we are up for hours, getting dirty, running wires, setting up shelters," said Sergeant Mason. "When we are all set up, it's all about maintaining the equipment. But if you see us running around after initial setup then something is wrong. Just like any base infrastructure, if it isn't broke, then you don't see us."

Last fall, when we were tasked to support Hurricane Gustav and Hurricane Ike, our team and equipment were ready to go in four hours. — Lt. Col. Laura Lenderman

Staff Sgt. Elizabeth Clingan gives the "clear" signal to the loadmaster inside a C-130 aircraft from the 192nd Air National Guard. The aircraft was flown to Travis Air Force Base, Calif., to pick up a three-person team from the 36th Contingency Response Group in Guam and a Travis team plus truck and trailer unit from the 615th Contingency Response Wing. Once the vehicle was loaded, the teams boarded and departed for Southern California, where they trained with U.S. Army forces.

STORY BY STAFF SGT. J. PAUL CROXON ✪ PHOTOS BY LANCE CHEUNG ✪ DESIGN BY G. PATRICK HARRIS

THE GOONEY BIRD

PILOT WITNESSES ESTABLISHMENT OF AIR MOBILITY

To retired Maj. Bill Voigt, aircraft resemble birds. His descriptions of the P-39 Airacobra are all about sleek lines and high speed. Like a falcon, it was a predator of the sky and exhilarating to fly. However, the C-47 Skytrain that he flew during World War II was more akin to an albatross, ungainly on the ground but graceful in the air earning it the affectionate nickname "Gooney Bird."

"It was a new world, easy and gentle to fly," said Voigt who flew the C-47 and its successors throughout his career but preferred the C-46 Commando because it was more challenging. He eventually logged 11,300 flight hours and became one of the first pilots to qualify in 13 different airframes.

His journey to the cockpit is a case study on the evolution of air mobility from its Army Air Corps beginnings. The journey for Voigt began in 1939 as a private in the Maryland National Guard, but even then he wanted to fly.

"I remember wanting to be a pilot ever since Charles Lindbergh made his trip across the Atlantic," he said. "I would have enlisted into a flying unit if I could, but there weren't any close to me. So I joined the 29th Infantry Division."

The desire to fly remained with him when his unit was called to active duty Feb. 3, 1941. It was while he was serving on active duty that he was able to realize his dream.

"In '42, members of the Army Air Corps visited us looking for aircrew volunteers. I put in my application for aviation cadet training hoping to be accepted." After a written test and physicals, only Sergeant Voigt remained from the 205 applicants. "I felt like I hit the mother lode," he recalled. "Ever hear of hog heaven? I was in it."

At the time then-Cadet Voigt said he wanted to fly fighters in combat. Yet after completing the basic pilot course at Maxwell AFB, Ala., and three months as an instructor pilot he was transferred to Air Transport Command to become a transport pilot. At this time he was assigned to one of the commercial airlines, which taught ATC pilots to fly transport aircraft. According to Air Mobility Command Museum officials, commercial airlines supported the newly created Air Transport Command by training military pilots. Some airline pilots even received direct commissions flying transport aircraft.

A C-54 is loaded with supplies during the Berlin Airlift. This C-54M is now a static display at the Air Mobility Command Museum, Dover AFB, Del.

While training with the commercial airlines, Voigt was recognized for his ability, graduating near the top of his class.

"The chief pilot called another student and I into his office. He told us we were the top two graduates and offered us spots on the airline roster after the war if we wanted it. I declined the offer and elected to remain in the service," he said.

After more transport experience, he got his chance to fly fighters, though not in combat like he wanted.

"It was probably for the best. I would have been shot down anyway," he joked.

One of his assigned ATC missions was to transport fighters from production facilities to modification sites. This mission gave then-Lieutenant Voigt the chance to fly the P-39. He also flew P-40 Warhawks, P-51 Mustangs and P-47 Thunderbolts. One stateside ferry mission was to pick up a P-51 in Long beach and deliver it to Newark, N.J. He was then flown commercially to Buffalo, N.Y., to take a P-39 back to Great Falls, Mont. for ultimate delivery to Soviet pilots at Fairbanks, Alaska.

His first assignment with the Gooney Birds was in 1944 when he deployed to Aden, Arabia, in present-day Yemen. He had the option for a static 18-month tour or a 1,000-flight-hour tour. He chose the latter since it afforded him the opportunity to fly more frequently and it would get him home to his new wife sooner.

"I volunteered to fly as much as they would let me," he said. "I wanted to be home with my girl. It took me 13 months."

The typical Gooney Bird mission was transporting troops and supplies from Aden to India. Eventually, the C-47s were replaced with the more capable C-54 Skymaster, and later, it was aboard this larger albatross that Voigt did what he said was the best flying of his career.

After the end of World War II, Major Voigt was assigned to Fort Dix, N.J. During his stateside duty he was issued temporary duty orders for a 90-day assignment to Rhein-Main Air Base, Germany, supporting what was to be the first major test of the new Military Air Transport Service – the Berlin Airlift.

In Germany he flew the C-54 carrying 10 tons of coal on each of his 116 flights, but the flying was not the gentle soar of an albatross. It was with business-like precision needed to supply the Berlin population with

Retired Maj. Bill Voigt stands in front of the only remaining C-54M, which was modified to transport coal during the Berlin Airlift. Major Voigt flew the aircraft and now volunteers at the museum, telling his story to visitors.

The engine of a C-47 "Gooney Bird" is on display in a diorama at the Air Mobility Command Museum. Major Voigt flew the C-47 in World War II and during the Berlin Airlift.

Behind the stick, Major Voigt , recalls his days as a pilot from the cockpit of a C-47 "Gooney Bird." His military service includes time on active duty in the Guard and in the Reserve. While in the military, he qualified to fly 13 different airframes.

the food, fuel and supplies required for survival.

"It was every man for himself in the beginning," he said. "If you missed your landing, you would get back in the pattern and try it again. I always thought the landing was the best part of the flight. You can teach most people to fly straight and level, but you land it in one piece or 100."

According to AMC Museum officials, as the airlift continued, C-54s began replacing the "Gooneys" and eventually standardized the American fleet. This streamlined operations and enabled the Air Force to land an aircraft once every three minutes, increasing the amount of supplies delivered five-fold compared to the beginning of the operation.

"After 11 months we broke the Soviet resolve," said Voigt. "We delivered 2.3 million tons of stuff and flew more than 277,000 missions."

Voigt returned home to his wife and continued his service. He went on to fly increasingly more capable aircraft such as the C-124 Globemaster II.

By the end of his career, he had served in the Guard, Reserve and on active duty and supported World War II, the Cold War, and the Korean Conflict, and was able to see first-hand the value of airlift and air mobility.

"In my opinion, people don't realize the role of the guys behind the lines," he said. "Airlift was a major line of support."

Without airlift, a second strike might not be possible.

Currently Voigt volunteers at the AMC Museum telling visitors about his career. The museum has one of the most accurately restored Gooney Birds in the world, as well as the only remaining C-54 modified to transport coal during the Berlin Airlift.

For more information on the museum or to see the Gooney Bird in person, call 302-677-5938. Admission is free.

STORY BY BY CAPTAIN CANDACE PARK ✪ PHOTOS BY STAFF SGT. JOEL MEASE

ANSWERING MY NATION'S CALL

The smell of sulfur overwhelmed me as I flew with more than 20 servicemembers in a U.S. Army CH-47 Chinook helicopter over the volcanoes of Nicaragua. I was on the way to Costa Rica as part of a disaster response team from Joint Task Force-Bravo in Honduras.

A stinky smoke seeped out from the tops of volcanoes to the left and to the right of the helicopter; it was clear something had disturbed the ground below. The smoke signals were like bread crumbs leading us to the culprit, a 6.1-magnitude earthquake with an epicenter near San Miguel, Costa Rica, that had shaken the hills and buried dreams about 24 hours before.

The Costa Rican government declared the earthquake a disaster and asked for help from neighboring countries. Under the direction of U.S. Southern Command, JTF-Bravo personnel answered the call.

Our mission was clear—help save lives and come home safely—but I wondered if 34 servicemembers and four helicopters could really make an impact after such a devastating quake. As the public affairs director, I was brought along to document the relief efforts and facilitate media interviews and access to disaster sites

Officials with the disaster response agency in Costa Rica, the National Emergency Commission was completely organized and knew exactly how JTF-Bravo responders could help in their ongoing efforts to search for and rescue people.

When we arrived at the operations headquarters in San Jose, Colombian UH-60 Blackhawk helicopter pilots already were searching the area for victims. The Colombian pilots and CNE officials briefed our team, and within hours we were back in the air searching the hills with the Colombians

I have never in my life felt such an awful, eerie feeling as I did when we landed in the town hit hardest by the quake. It was oddly quiet. There was not a single bird or animal in sight. The gaping cracks in the earth seemed so final and menacing.

It looked like time had stood still since lunchtime two days ago when the earthquake hit. A restaurant near the quake's epicenter was now a tomb for a dozen residents who had been lunching.

Flying over the area in the helicopter, I saw a road on the hillside that had slid down into nothing. It just disappeared into the dirt. A bus was lodged into the side of the mountain, half buried.

My forward deployed "office" was a staging area, a soccer field in San Miguel where the helicopters landed to take rescue workers out to the disaster areas to look for people. There, I arranged helicopter flights for media to get out to the rescue sites. I served as a translator between servicemembers and reporters, Costa Rican police and fire fighters. During all of this activity, I was constantly praying to God someone would be found alive

And then we got a call that an elderly woman had been found. A JTF-Bravo helicopter aircrew picked her up and brought her to the soccer field where an ambulance waited to take her to the hospital. When she came out on the stretcher, swarms of people rushed to her aid. It was the moment everyone had been waiting for. Hope became reality. Someone had been saved.

Many others were not as fortunate. After a while, the mission focus changed to recovery instead of search and rescue. Families who were missing loved ones were desperate to find them, dead or alive. The agony of not knowing was clear during the evening news as families and friends told their heart wrenching stories, pleading for help through the mountain of grief and worry that was lodged in their throats.

The most dramatic recovery was a man buried in the mountainside in his truck, his lifeless hand outstretched from the dirt. A rescue worker dug his body out while hanging for hours from a hoist onboard a Colombian Blackhawk hovering overhead.

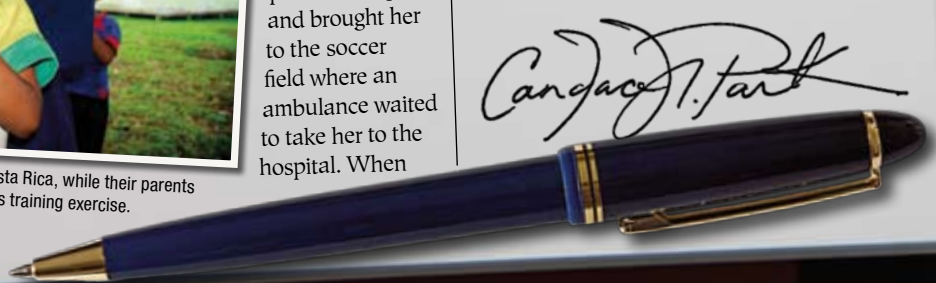
For three days the JTF-Bravo team partnered with the Costa Rican emergency responders to search for and evacuate 90 victims. The four helicopters flew 46 hours and transported more than 150 rescue workers to and from the disaster sites.

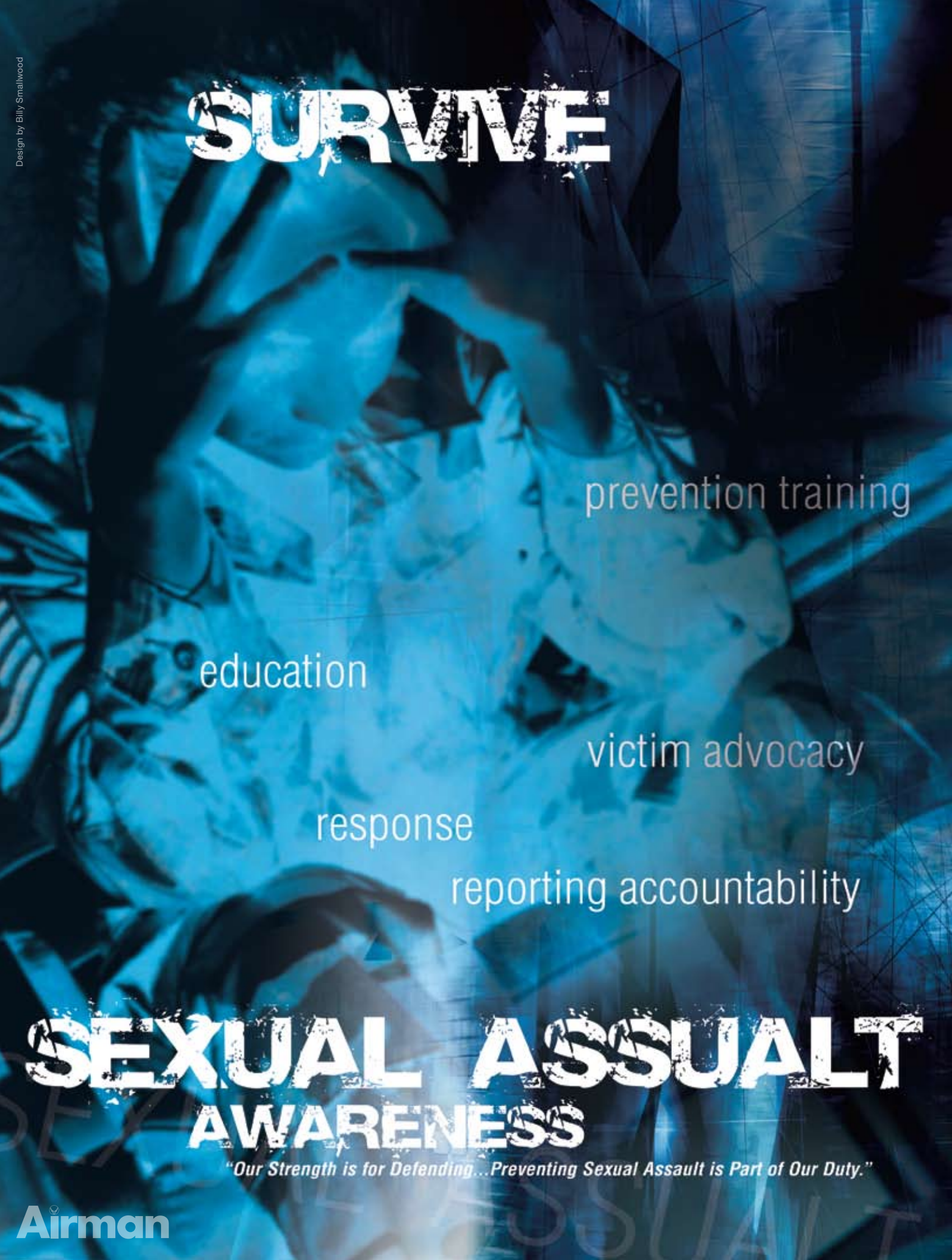
There is a distinct feeling you get when you're in the right place at the right time. It feels like your stomach is warm, your head is clear, and your mind is taking a snapshot of the moment. During those three critical days after a terrible disaster, the JTF-Bravo Airmen were in the right place at the right time, poised to provide help to those most in need. Many members of the team described to me later how awestruck they felt to have been a part of this mission.

Those chaotic 72 hours are engrained in my memory. They are hours of restless hope, that smell of sulfur and dirt and are set to the soundtrack of chopper blades and the clamor of loud voices all talking in Spanish at once.

They are the hours when I first truly realized how proud I am to be an Airman,to have answered my nation's call and to have been afforded the opportunity to be a part of something much bigger than myself.

First Lt. Candace Park entertains local children in La Corona, Costa Rica, while their parents receive a preventive medicine briefing during a medical readiness training exercise.





Design by Billy Smallwood

THE FINAL FRAME

HITCHING A RIDE | *photo by* CAPT. CHETT COLLIER

An aircrew from the Air Force Reserve Command's 315th Airlift Wing loads a Coast Guard H-65 Dolphin helicopter onto a C-17 Globemaster III April 7 on the Charleston Air Force Base, S.C., flightline. The helicopter is going to Central America.